

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Technical Report No. 32-964

Ranger VII Photographic Parameters

W. E. Kirhofer
D. E. Willingham

GPO PRICE \$ _____

CFSTI PRICE(S) \$ _____

Hard copy (HC) 4.25

Microfiche (MF) 1.50

ff 653 July 65

FACILITY FORM 602

N67 11817

(ACCESSION NUMBER)

~~321~~ 321

(PAGES)

CR-79938

(NASA CR OR TMX OR AD NUMBER)

(THRU)

(CODE)

14

(CATEGORY)

jpl

JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA

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Prepared Under Contract No. NAS 7-100
National Aeronautics & Space Administration

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ABSTRACT

Photographic parameters necessary for detailed interpretation of the *Ranger VII* pictures are listed for all of the A- and B-camera photographs and for selected P-camera photographs. Parameter accuracies and the method of data generation are discussed.

I. INTRODUCTION

This Report is intended as a supplementary tool for use in the analysis of the *Ranger VII* photographs of the Moon. As such, it contains a comprehensive list of the photographic parameters necessary for the detailed interpretation of the unrectified *Ranger VII* photographic atlases and film strips. The intent is to supply data in a form useful to the largest possible audience, including those who do not have photographic facilities at their disposal for rectification of the pictures. However, addi-

tional data are supplied for use in reproducing the object scene geometry.

A brief description of the method, assumptions, and accuracies which characterize the computation of the tabular photographic data is given. Each block of tabular data is identified by a tabular data number, the atlas frame number (if appropriate), and the frame number appearing on the original film recording of the mission.

II. THE RANGER TELEVISION SYSTEM

The *Ranger* Block III spacecraft television system contained six cameras, divided into two separate channels designated F and P. The complete system has been discussed adequately in the *Ranger* atlas series; however, the camera characteristics are repeated here (Table 1).

The reticle pattern deposited on the faceplate of each vidicon differed for the F and P channels. The reticle patterns and the associated dimensions of the F-channel cameras are shown in Fig. 1. Because of the decreased target size used for the P cameras, the reticle pattern

Table 1. Camera characteristics

Characteristic	Camera					
	A	B	P ₁	P ₂	P ₃	P ₄
Focal length, mm	25	76	76	76	25	25
f number	1.0	2.0	2.0	2.0	1.0	1.0
Frame time, sec	2.56	2.56	0.2	0.2	0.2	0.2
Horizontal frequency, cps	450	450	1500	1500	1500	1500
Exposure time, msec	5	5	2	2	2	2
Field of view,* deg	25	8.4	2.1	2.1	6.3	6.3
Target size, mm	11	11	2.8	2.8	2.8	2.8
Scan lines	1150	1150	300	300	300	300
Time between frames, sec	5.12	5.12	0.84	0.84	0.84	0.84

^aThe actual field of view in one direction was somewhat smaller than the given numbers because of the presence of a mask at the edge of the vidicon target which was used to determine scene black on each scan of the electron beam.

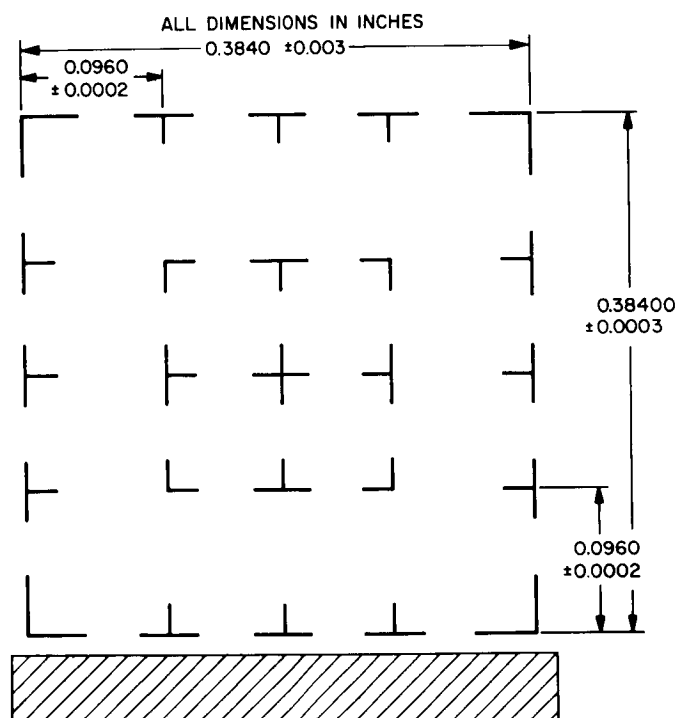


Fig. 1. Reticle dimensions for F-channel cameras

was designed differently. The pattern type and dimensions are shown in Fig. 2.

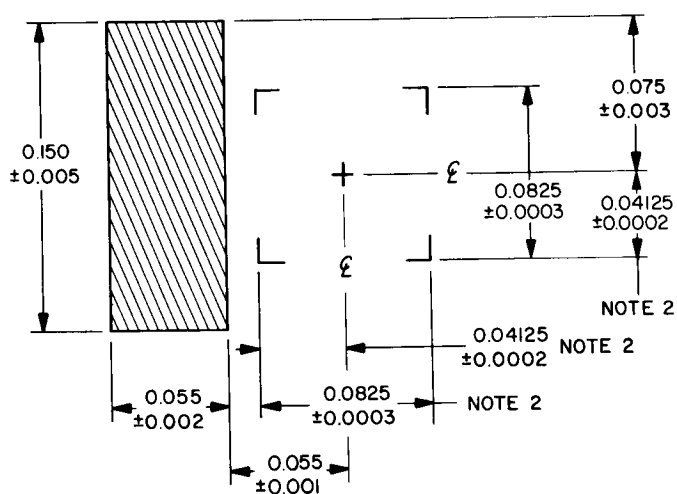


Fig. 2. Reticle dimensions for P-channel cameras

In some cases, it was necessary to use a vidicon tube with an F-type reticle pattern for a P camera. In these instances, only the center reticle is visible, as all other reticles fall outside the P-camera target area. This was the case for the *Ranger VII* P₁ camera.

III. METHOD OF COMPUTATION OF SPACECRAFT-PHOTOGRAPH PARAMETERS

A. Computer Program Description

The photographic data contained in this Report were generated by a computer program which uses a hyperbolic approximation to the spacecraft trajectory near impact (Ref. 1). Knowledge of the attitude-sensor locations within the spacecraft and the sensor stimuli locations (Sun and Earth) in Moon-centered coordinates permitted computation of the spacecraft orientation. The oscillations and motion of the spacecraft as determined by the telemetry data were incorporated as a correction to the calculated orientation. Preflight calibration data were utilized to provide an initial determination of the camera system pointing direction in terms of spacecraft coordinates. The computer program spacecraft-camera model could then be used to compute the location of any picture point on the lunar surface in terms of lunar latitude-longitude coordinates.

For accurate photographic parameter computations, however, one cannot rely completely on preflight calibration data, and a verification or derivation of the camera parameters from the flight data is necessary. Among these camera parameters are camera cycle time, focal length, vidicon target dimensions, and true camera orientation within the spacecraft. With the knowledge of these parameters and the indicated spacecraft characteristics, the mapping from the Moon to the camera vidicon surface is then completely specified.

B. Solution for Camera Parameters

The camera cycle time during actual flight could be verified by postflight examination of the magnetic tapes which recorded the data, along with an accurate 1-Mc time base signal. The postflight determinations of cycle time yielded values that deviated less than 0.01% from the design value; however, the postflight values were still used in the computations. Because of shutter stroke unknowns, the time at which the last picture was exposed could be determined no more accurately than ± 0.002 sec. This value may be of some consequence in the computations for the last picture parameters but certainly is of little significance for all other picture computations.

The preflight evaluation of the camera pointing directions within the spacecraft may not be representative of flight alignment for several reasons, among which are accuracy of original data, biases in the spacecraft sensor system, and launch vibrations. During the construction

of their series of *Ranger* lunar maps, the Aeronautical Chart and Information Center* determined the latitude-longitude of the surface point covered by the central reticle from each camera at various times during the descent. These data were used by JPL to solve for the pointing direction of each camera that would best fit the observed data. All corrections were made by changing the pointing direction of the camera within the spacecraft coordinate system. The magnitude of shift of the pointing directions as compared to the preflight values was about 0.5 deg. Note that this procedure does not separate misalignment effects due to attitude-sensor biases from camera misalignment, but does allow a combined correction for both types of errors.

Measurements from the film data showed a variation in the dimensions from reticle to reticle of up to 6%. These variations were found by comparing the distance between two reticles at different locations within the frame. The 6% variation applied, usually, to measurements made in widely separated areas of the frame and may have been due to local nonlinearities in scanning rate, or other camera electronic characteristics. It remained to be determined, however, whether these variations could be caused by inaccuracies in the placement of the reticle pattern on the vidicon surface and, finally, what the true focal length of each camera was. One could not, of course, solve independently for the reticle locations and focal lengths.

It was necessary to obtain additional data from the Aeronautical Chart and Information Center, this time in the form of surface points covered by the corner reticles of each camera during descent. Assumption of a focal length then made possible a best fit of the data to solve for the reticle location on the vidicon surface. It was found from these data that for a selected focal length, the reticles on the F cameras were within ± 0.06 mm (1 σ) of their theoretical location, with the mean value very close to the theoretical position. Because of the small fields of view on the P cameras, the data scatter was large, but the mean values of the solution for these reticles remained very close to the theoretical values. Even though the data scatter in all cases was larger than one would desire, the distributions were such as to give high confidence in the theoretical reticle positions. Thus, it was assumed that the reticles were deposited accurately.

*United States Air Force, St. Louis, Missouri.

One should note that the readout linearity specification of the camera system was 2% of the picture dimension, which, in extreme cases, could give reticle-to-reticle variations on the order of 6 to 8%. In the course of the above solutions, the rotation of the individual cameras with respect to their theoretical locations was also obtained.

Assumption of the reticle locations as correct, then, made possible the solution of the camera focal distance from vidicon surface to lens exit pupil that best fit the observed data. Again, the data scatter was rather large for the narrow-angle cameras. The focal lengths of three lenses were measured prior to flight, and upon comparison of the preflight and empirically derived postflight values, it was found that they agreed quite well (see Table 2).

Table 2. Pre- and postflight focal-length determinations

Camera	Focal distance, mm determined from flight data	Preflight lens focal length, mm
A	25.64 ± 0.25	No measurements
B	74.62 ± 0.75	74.8
P ₁		74.8
P ₂	74.61 ± 4.5	74.65
P ₃	26.1 ± 1.6	No measurement
P ₄	26.1 ± 1.6	No measurement

The data scatter is reflected in the tolerances listed for each focal distance. A nominal value for the Angenieux 25-mm lens was found to be 25.75 mm; unfortunately, individual measurements were not made on the *Ranger VII* A, P₃, and P₄ lenses. Camera P₁ had no corner reticles, so that no postflight determination could be made.

C. Assumptions and Accuracies

It has been assumed thus far that the trajectory can be approximated by a hyperbolic path (where the parameters are matched at impact with the true path), and that the theoretical reticle locations and the preflight measured focal lengths are correct. One other assumption made of necessity for the table generation was that of the Moon being a spherical body of radius equal to that chosen for the impact location.

The assumptions of the reticle locations and focal lengths were previously shown to have been reasonable, at least in comparison to the observable data scatter.

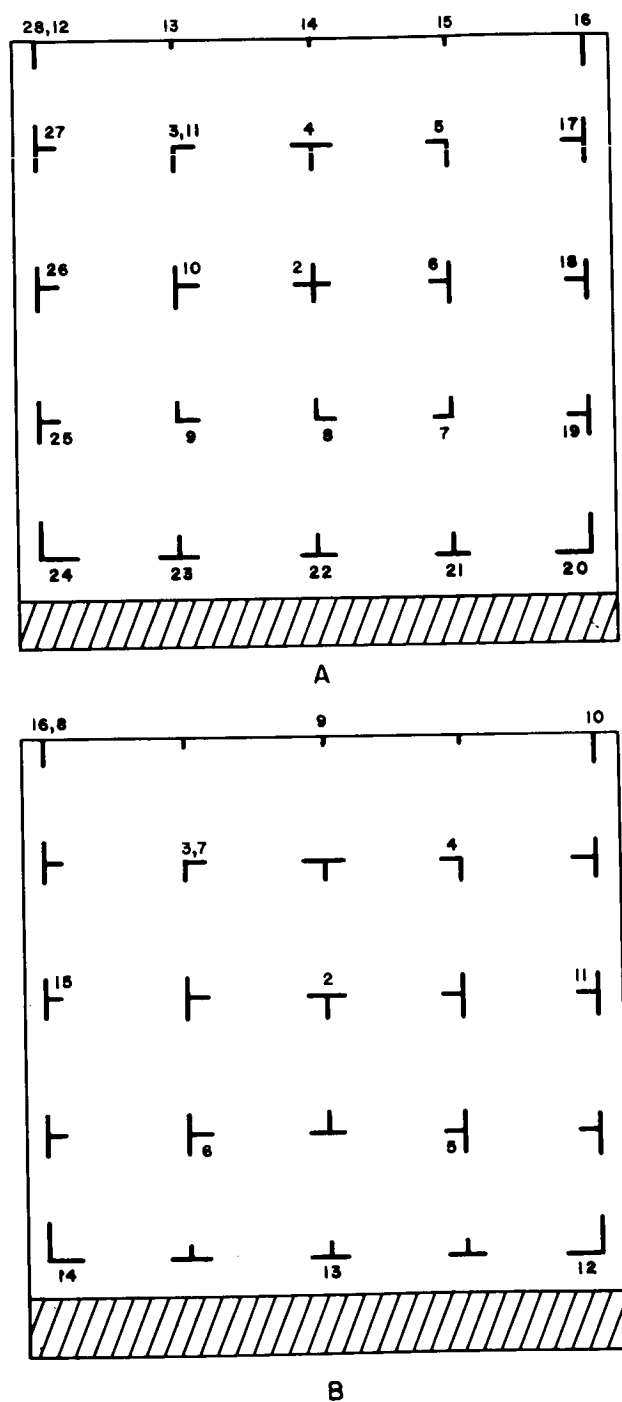


Fig. 3. Reticle number assignment, F-channel cameras

A comparison study of hyperbolic trajectory approximation to the integrated trajectory model has shown differences in altitude and time computations of less than 0.01% in the worst case. Finally, since all the computations were referenced to zero time at impact, and since the trajectories were steep with respect to the surface altitude variations, the assumption of a spherical Moon caused negligible errors.

Further, the impact point specified by the Aeronautical Chart and Information Center has been used. No uncertainties have been quoted for this point, but the latest orbit determination from tracking data gives a $1-\sigma$ uncertainty ellipse of 0.10×0.03 deg semimajor and -minor axis dimensions and a value of 0.10 deg magnitude difference from the ACIC point.

D. Location of Points Within Each Camera Frame

In determining the points within each frame for which to compute photographic parameters, it is logical to use the reticle locations. Sets of such points were chosen, and each reticle for which calculations were made was given a number which corresponded to a point number in the tabular data (see Figs. 3 and 4).

A special problem arose, however, where a reticle was only partially shown or where no corner reticles existed (as in the case of camera P_1). For a partial reticle, the point was chosen at the intersection of the reticle and the edge of the frame. In the case of camera P_1 , points were selected at the two corners opposite the mask, and two other points were constructed as shown in Fig. 4.

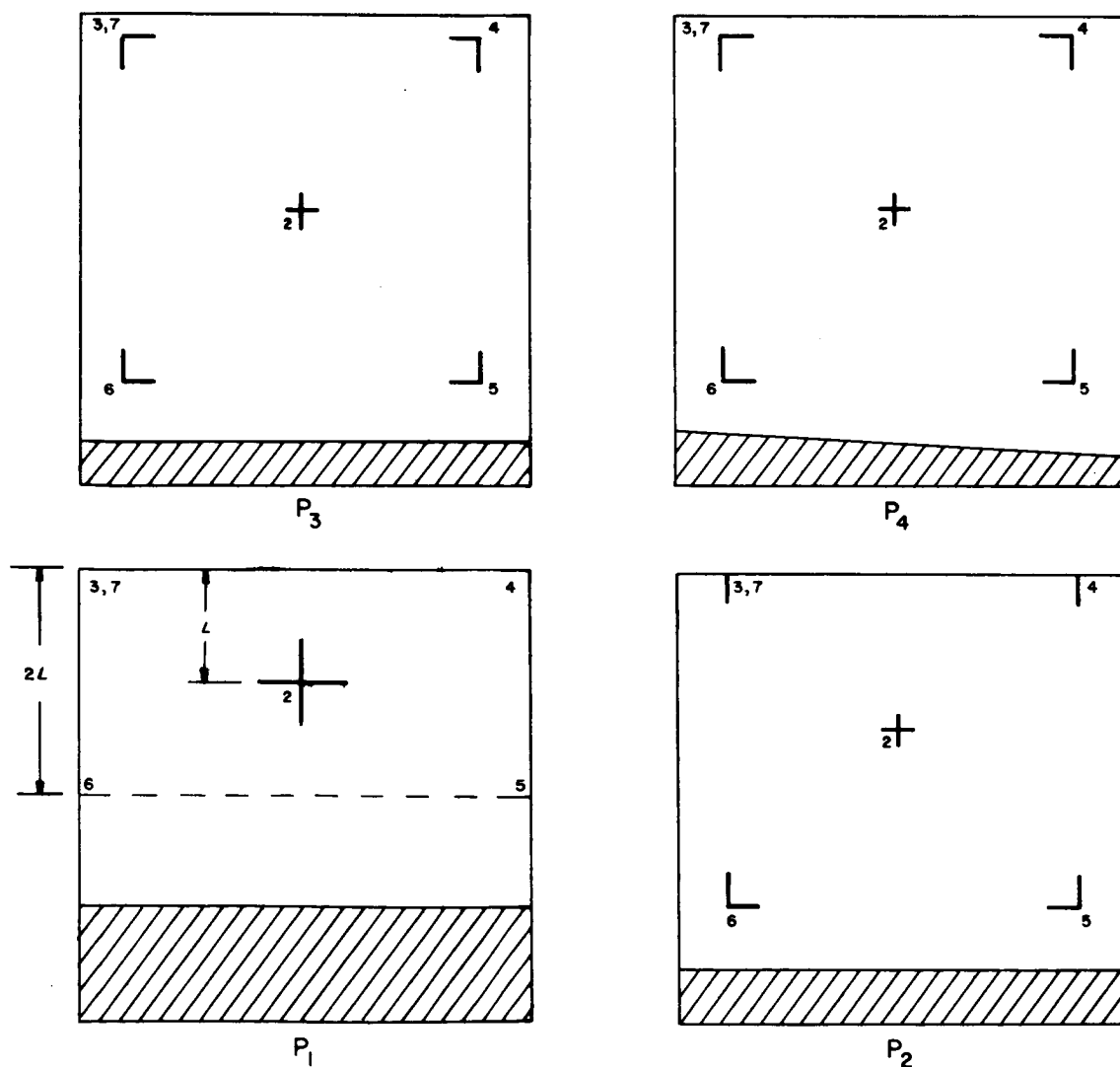


Fig. 4. Reticle number assignment, P-channel cameras

IV. CONTENT OF TABLES

A. Time- and Camera-Independent Parameters

The first page of the tabular data lists those quantities which are essentially time- and camera-independent for the duration of the picture-taking sequence. These quantities are particularly useful in reconstructing the object scene geometry on, say, a spherical globe (Fig. 5).

Subsolar point—the selenocentric latitude and longitude of the surface point intersected by the vector from the center of the Moon to the Sun.

Sub-Earth point—the selenocentric latitude and longitude of the surface point intersected by the vector from the center of the Moon to the center of Earth.

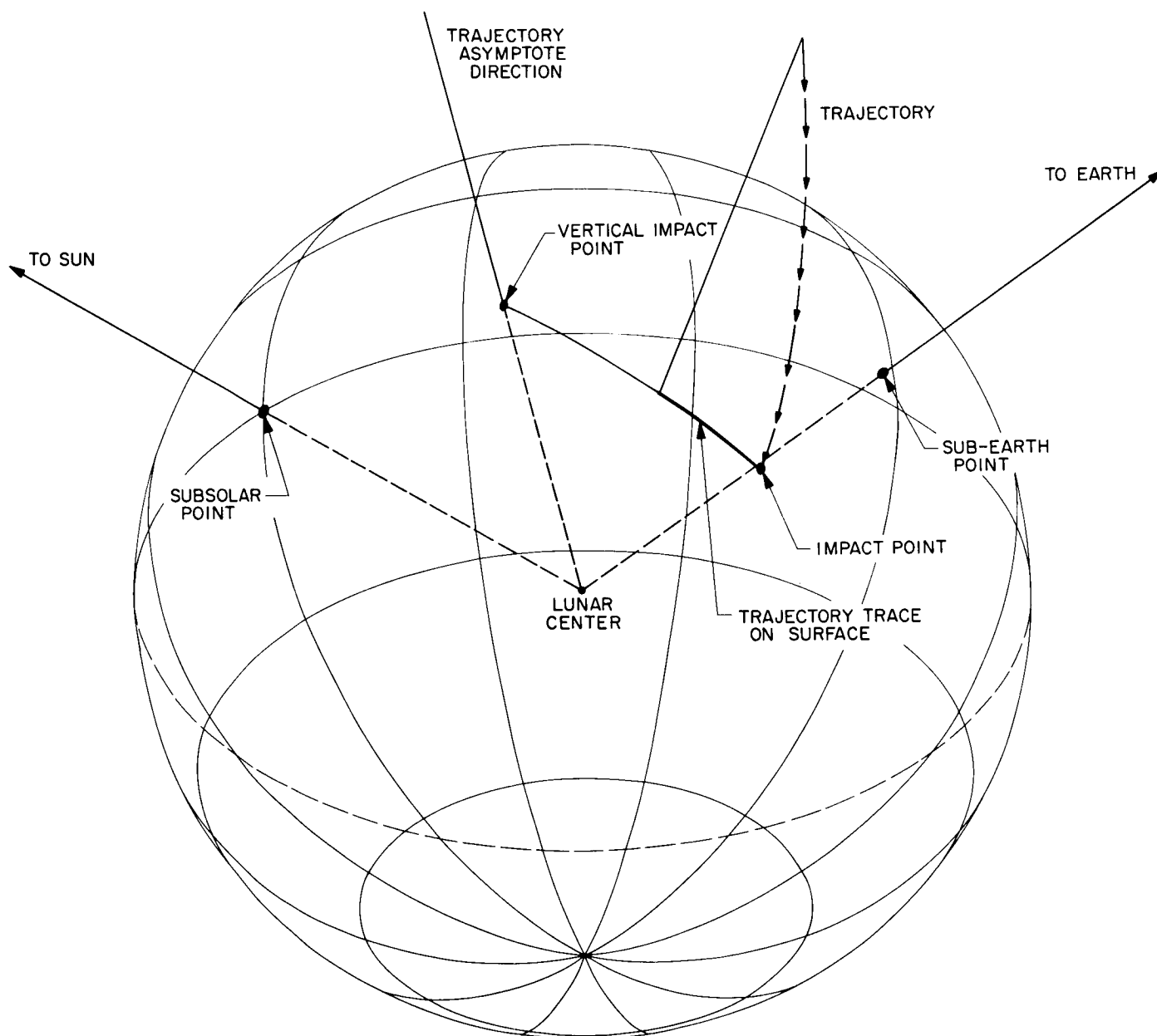


Fig. 5. Definition of subsolar, sub-Earth, and vertical impact points

Vertical impact point—the selenocentric latitude and longitude of the surface point intersected by the vector from the center of the Moon which describes the asymptotic direction of the spacecraft trajectory.

B. Time- and Camera-Dependent Parameters

The main body of the tables consists of data blocks pertaining to each picture listed. Each data block is divided into three sub-blocks or subgroupings:

1. Frame identification
2. Trajectory data
3. Photo data

1. Frame Identification

The parameters listed specify the photograph for which the data are generated.

TAB NO.—a number used to identify the table frames. The numbering starts at 1 and increases sequentially for each frame.

ATLAS NO.—the number that identifies, and is assigned to, those frames which appear in the *Ranger* atlas series. In the *Ranger VII A* and *B* atlases, the **PHOTO NO.** and **ATLAS NO.** are identical. In all other atlases, this is not the case.

POD NO.—the number of the frame as it appeared in the *primary original mission data*. In all cases, calculations are made for the last frame from each camera, so that the position of the frame in the overall sequence from camera initiation to impact is easily computed.

GMT—Greenwich Mean Time at which the photograph was exposed. This time is assumed to be known within ± 0.005 sec.

2. Trajectory Data

Trajectory data are those data necessary to describe the position and direction of movement of the spacecraft with respect to the Moon. The parameter headings are listed and explained below.

SEC TO IMPACT—the interval of time prior to spacecraft impact (seconds).

ALT—the spacecraft altitude above the surface of the Moon (kilometers). A spherical Moon of radius equal to that of the impact location is assumed.

LAT, LON—the subspacecraft point (degrees); i.e., the selenocentric latitude and longitude of the surface point intersected by the vector from the center of the Moon to the spacecraft.

R—the magnitude of the vector from the center of the Moon to the spacecraft (kilometers).

V—the spacecraft Moon-fixed velocity magnitude, i.e., with respect to the Moon's surface (kilometers per second) (Fig. 6).

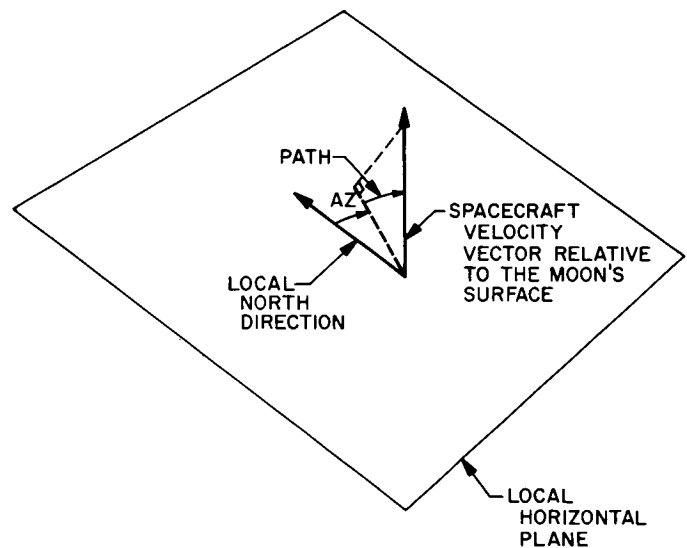


Fig. 6. Definition of path and azimuth angles

PTH—the angle between the Moon-fixed velocity vector and the local horizontal plane, positive upward (degrees) (see Fig. 6).

AZ—the azimuth direction of the projection of the Moon-fixed velocity vector into the local horizontal plane referenced to the local north direction, positive east of north (degrees) (see Fig. 6).

3. Photo Data

The parameters in this sub-block are a function of both photograph number and position within the photograph. For this reason, several points within the frame format are specified, and parameter values are derived for each of these points. The points within each camera format

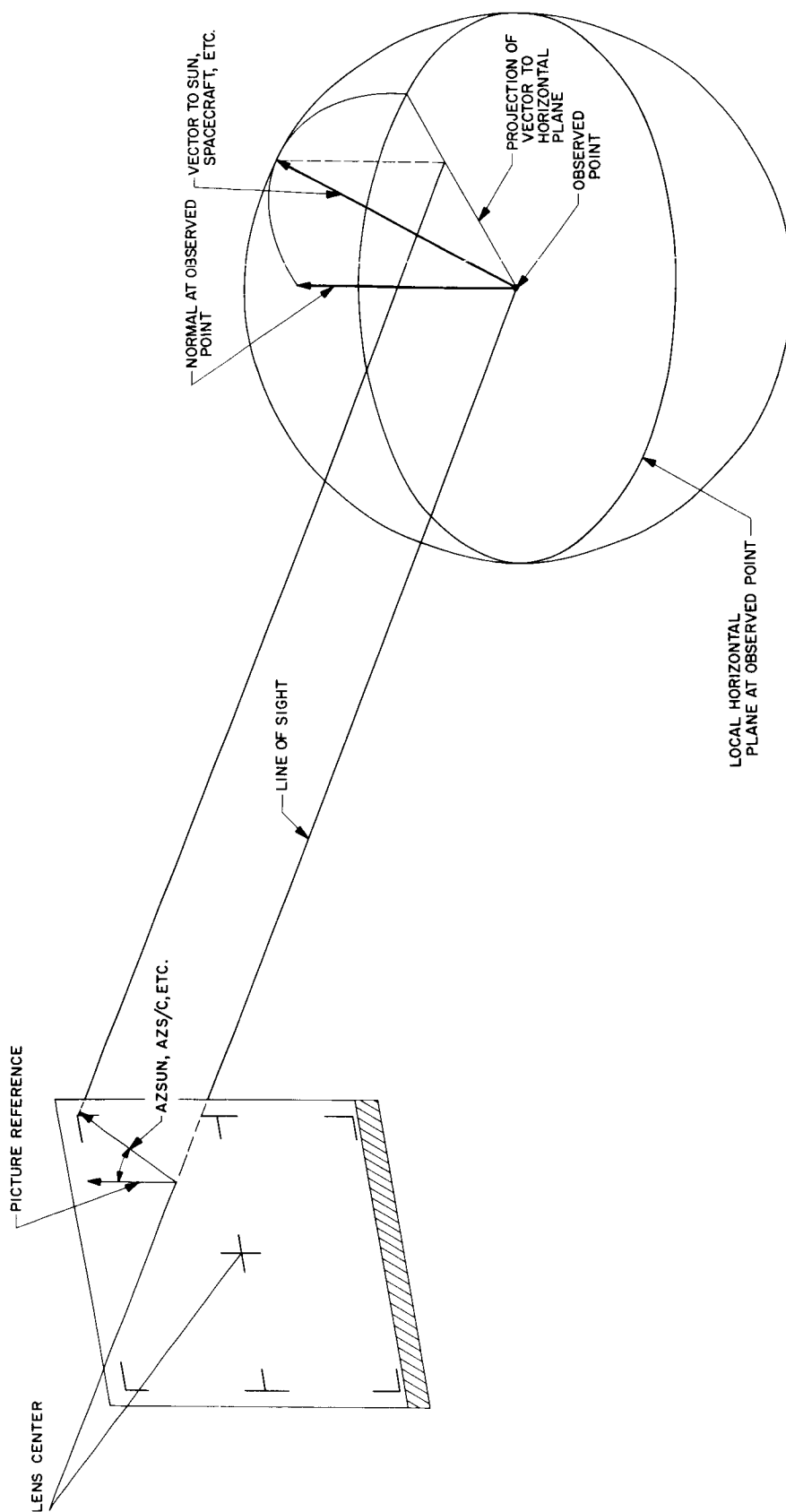


Fig. 7. Definition of azimuth directions

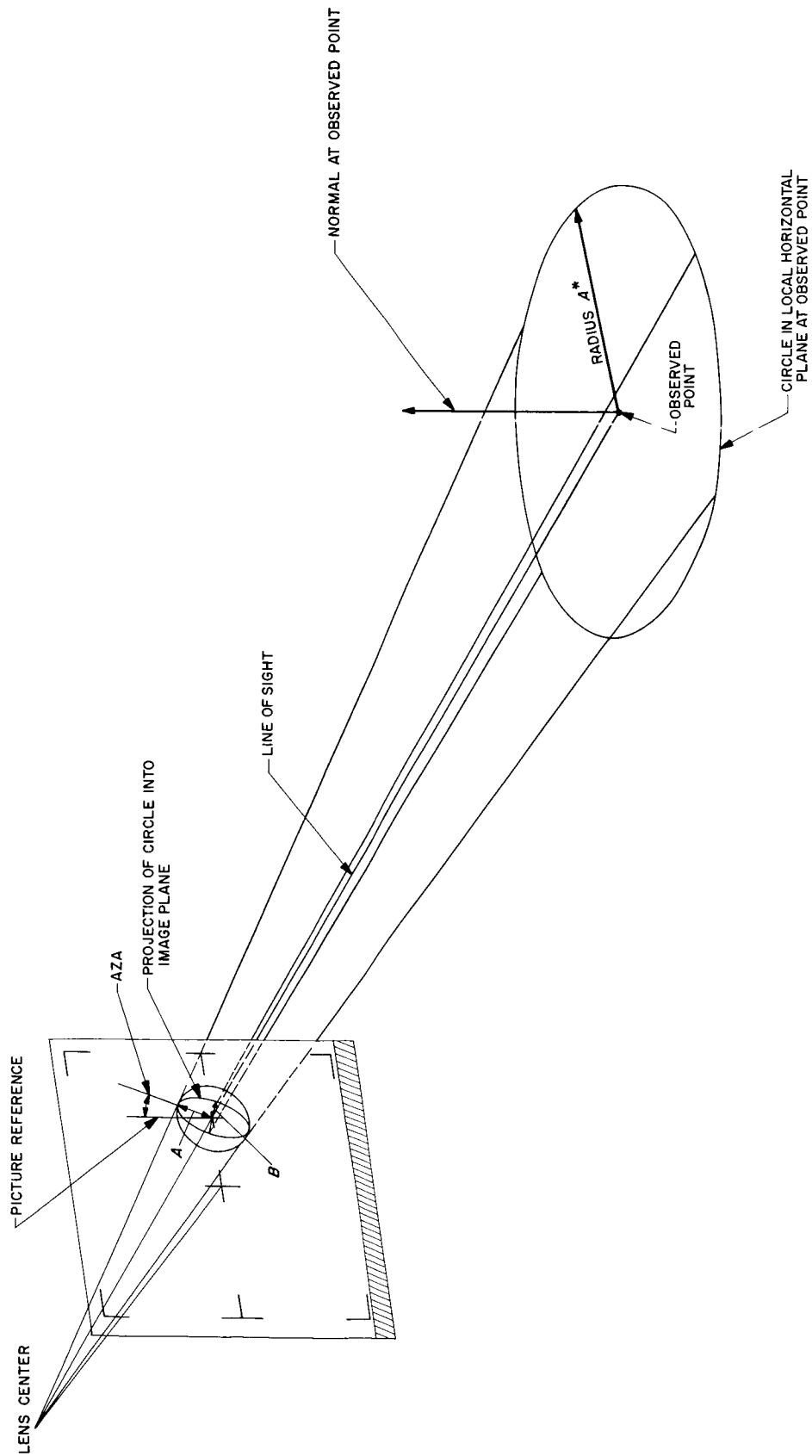


Fig. 8. Mapping of a circle into image plane

are taken at the reticle locations. Figures 3 and 4 identify the point number associated with each reticle of the *Ranger VII* cameras. In some cases, data are not derived for all reticles. Note also that the number 1 is not used to identify the reticles; this number is assigned to the velocity vector and, when it appears in the table, the velocity vector is within or near the field of view of the camera. The specification of this point, then, locates the point of zero image motion within the frame.

The parameters for which calculations are made at each picture point are described below. In all that follows, a spherical Moon with radius equal to that of the impact location is assumed.

The user is cautioned that angles are not preserved in the rectification of photographs. Thus, the angular values given in these tables are valid only for the unrectified *Ranger* pictures.

PT—the point number or reticle for which the calculations are made (see Figs. 3 and 4).

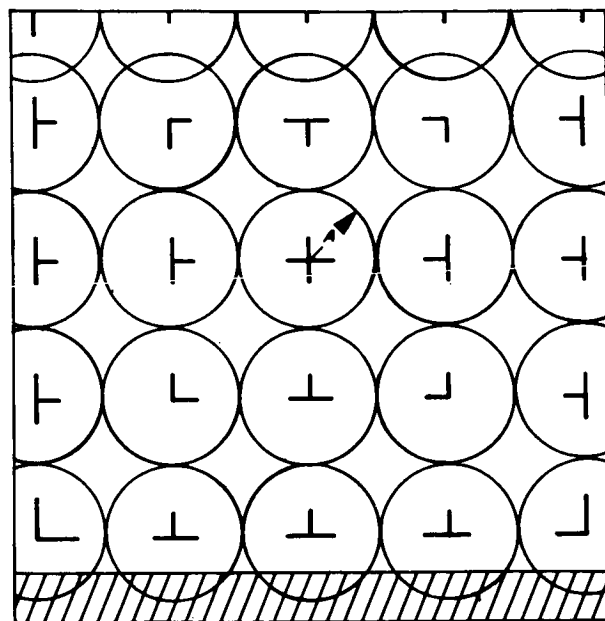
LAT, LON—the surface point selenocentric latitude-longitude coordinates covered by the reticle (degrees), hereafter referred to as the *observed surface point*.

RANGE—the distance from the camera to the observed surface point (kilometers).

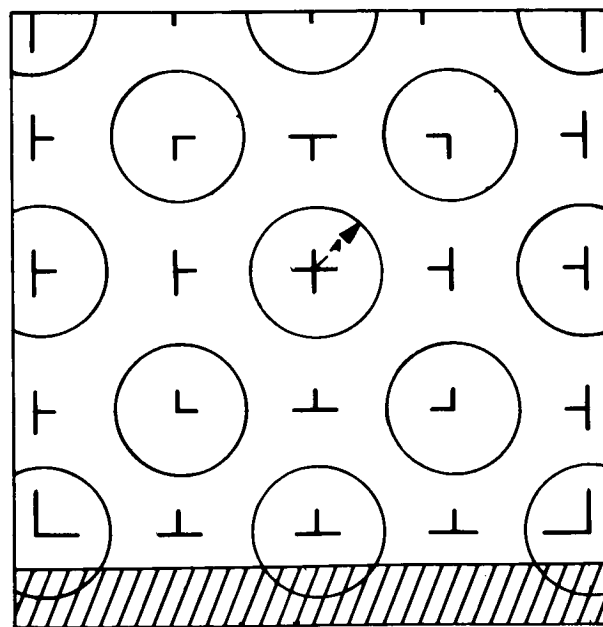
AZ S/C—the picture-plane azimuth angle to the spacecraft, with respect to the picture reference and positive clockwise (degrees). This azimuth is found by obtaining the projection of the observed-surface-point-to-spacecraft vector into the local horizontal plane, and then mapping the projection into the picture or image plane (Fig. 7).

AZN—the picture-plane azimuth angle to true lunar north, with respect to the picture reference and positive clockwise (degrees). This azimuth is found by obtaining the projection of the lunar-center-to-north-pole vector into the local horizontal plane and then mapping the projection into the picture plane.

AZSUN—the picture-plane azimuth angle to the Sun, with respect to the picture reference and positive clockwise (degrees). This azimuth is found by obtaining the projection of the lunar-center-to-Sun vector into the local horizontal plane and then mapping the projection into the picture plane (see Fig. 7).



A



B

Fig. 9. Possible loci of semimajor axes of length A , resulting from mapping of surface circle with radius A^*

The following quantities describe the "skewness" of the photographs. In particular, these quantities detail the manner in which a circle on the surface, centered at the observed surface point, is mapped into an ellipse in the picture plane (Fig. 8).

AZA—the picture-plane azimuth angle to the major axis of the ellipse resulting from the mapping of a circle on the surface into the picture plane, with respect to the picture reference and positive clockwise (degrees).

A*—the radius of the circle on the surface that, upon being mapped into the picture plane, results in an ellipse of semimajor axis A (A^* in kilometers). In the case of the *Ranger* A and B cameras, the picture ellipse dimension A (Fig. 9) is specified as one-half the distance to the adjacent reticle. In the P cameras, the dimension A is related to the “base dimen-

sion” d as defined in Fig. 10. In Figs. 9 and 10, circles of radius A are circumscribed about each reticle for which data are derived. These circles indicate the locus of end points to which the semimajor axis of the ellipse resulting from imaging the surface circle of radius A^* will map.

B/A—the ratio of the semiminor to the semimajor axis of the ellipse resulting from the mapping of a circle on the surface into the picture plane.

The following quantities are useful for reproducing the photometric geometry and for photometric-brightness-to-slope conversions.

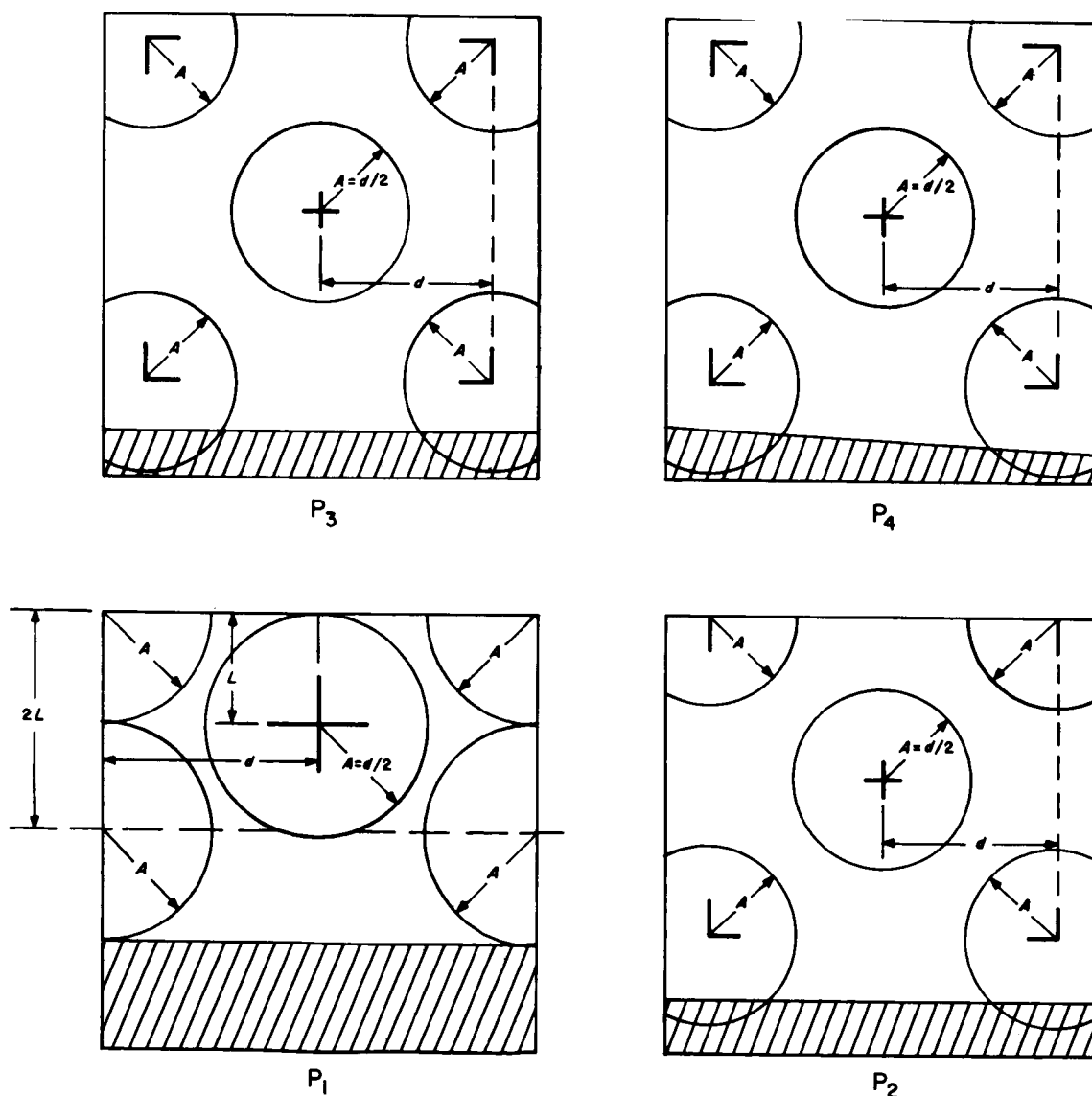


Fig. 10. Definition of base dimension d and possible loci of semimajor axes of length A , resulting from mapping of surface circle with radius A^*

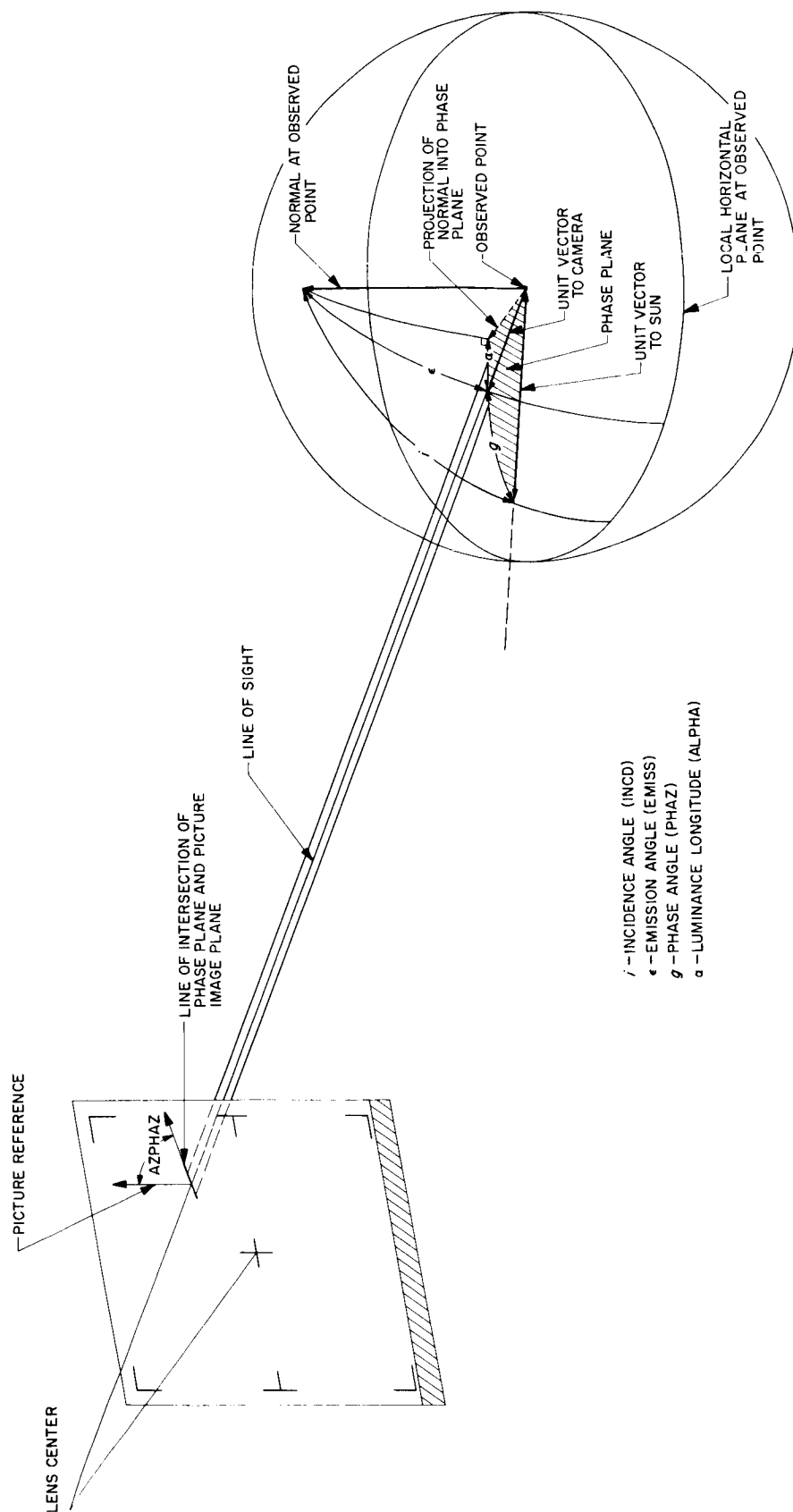


Fig. 11. Definition of AZPHAZ and photometric angles

AZPHAZ—the picture-plane azimuth angle to the phase plane, with respect to the picture reference and positive clockwise (degrees). This azimuth represents the line of intersection of the plane containing the phase angle (i.e., the phase plane) and the picture image plane. This is the only direction in which the picture may be scanned to derive exact elevation data when the two-angle lunar photometric function (Refs. 2 and 3) is used (Fig. 11).

INCD—the light incidence angle (degrees); i.e., the angle formed by the local normal (assuming a spherical Moon) and the vector from the observed surface point to the Sun.

PHAZ—the phase angle (degrees); i.e., the angle formed by the vector from the surface point to the Sun and the vector from the surface point to the camera.

EMISS—the emission angle (degrees); i.e., the angle formed by the local normal (assuming a spherical Moon) and the vector from the surface point to the camera.

ALPHA—the luminance longitude angle (degrees). This angle is the projection of the emission angle into the phase plane, with a sign convention applied. The angle is negative if it overlaps the phase angle and positive otherwise. The lunar photometric function is commonly written as a function of this angle and the phase angle.

The final two parameters of the table are used to provide a separate scaling technique from that of the surface circle mapping.

SCALE and PT to PT—the surface arc distance between the two points listed (kilometers).

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3. Willingham, D. E., *The Lunar Reflectivity Model for Ranger Block III Analysis*, Technical Report No. 32-664, Jet Propulsion Laboratory, Pasadena, California, November 2, 1964.

TIME- AND CAMERA-INDEPENDENT PARAMETERS

SUBSOLAR POINT

Latitude	Longitude
0.943°N	87.577°W

SUB-EARTH POINT

Latitude	Longitude
5.845°N	5.171°W

VERTICAL IMPACT POINT

Latitude	Longitude
5.572°N	53.669°W

TIME AND CAMERA-DEPENDENT PARAMETERS

RA-VII CAMERA FA

1

JULY 31, 1964 13 HR 8 MIN 52 SEC 561 MS

TAB NO 1

ATLAS PHOTO NO 1

POD SEQUENCE NO 8

TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
PHOTO DATA					1016.238		2095.91858	-3.304	-35.747	3831.374	1.936	-74.755	117.031		
PT	LAT	LON	RANGE	AZS/C	AZN	AZA	A*	B/A	ALPHA	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.184	-17.369	2283.44547	-8.4	7.2	-76.1	75.5	104.13083	0.899	-93.1	70.8	38.2	35.5	31.7	0
2	-13.099	-30.197	2155.76868	-26.2	5.2	-78.8	63.8	102.45143	0.938	-90.1	58.5	47.4	20.2	9.2	380.10777
3	-6.554	-37.338	2102.22369	28.4	2.0	-80.5	78.2	98.76499	0.998	-85.5	50.6	53.0	6.6	-2.7	290.98833
4	-6.221	-30.734	2112.00936	-56.4	3.8	-81.8	51.6	99.90674	0.988	-85.1	57.1	47.6	10.5	9.3	199.04560
5	-5.866	-23.607	2166.08078	-74.3	5.4	-82.6	34.7	101.96115	0.936	-84.6	63.9	42.2	21.9	21.6	208.93931
6	-12.882	-22.912	2213.96072	-49.2	8.4	-81.2	48.2	104.71918	0.884	-90.1	65.4	42.0	28.3	22.1	214.17325
7	-20.723	-21.416	2321.45020	-34.7	12.9	-81.0	57.3	106.32460	0.786	-95.7	68.0	42.3	38.8	21.1	241.43122
8	-20.749	-29.400	2254.02603	-16.4	7.3	-77.0	70.9	106.62397	0.846	-94.8	60.7	47.7	32.7	7.1	226.15709
9	-20.974	-36.904	2241.16312	6.0	1.6	-72.7	86.6	105.49186	0.862	-94.8	54.5	53.0	31.3	-6.2	212.46480
10	-13.382	-37.114	2145.16257	10.0	1.8	-76.1	83.9	101.46645	0.953	-90.1	51.9	52.8	18.4	-3.3	230.04864
11	-6.554	-37.338	2102.22369	28.4	2.0	-80.5	78.2	98.76499	0.998	-85.5	50.6	53.0	6.6	-2.7	206.92627
12	-1.204	-44.030	2130.79425	107.2	1.6	-84.8	37.4	97.94574	0.996	-82.1	43.5	58.7	15.5	-15.3	259.08221
13	-0.897	-37.553	2100.28665	146.0	2.3	-84.9	67.7	96.30054	0.985	-81.5	49.9	53.5	5.5	-3.7	196.38128
14	-0.519	-31.071	2110.15698	-117.9	2.9	-84.8	33.3	98.60537	0.999	-80.7	56.4	48.2	9.9	8.0	196.65871
15	-0.053	-24.276	2163.26111	-102.7	3.2	-84.3	17.9	100.66050	0.950	-79.9	63.2	42.9	21.5	19.9	206.28608
16	0.560	-16.742	2268.57971	-98.1	3.3	-83.3	10.7	104.08575	0.856	-78.8	70.7	37.8	34.1	32.6	228.91982
17	-5.470	-16.105	2274.05389	-79.9	6.8	-83.1	24.3	105.53697	0.842	-84.0	71.5	37.0	34.6	34.5	183.06855
18	-12.741	-14.718	2331.35843	-61.3	11.5	-83.5	36.7	108.73169	0.784	-90.2	73.4	36.6	39.6	35.8	224.94877
19	-20.968	-12.170	2440.64994	-47.5	18.4	-85.8	46.2	114.29927	0.672	-96.3	76.6	37.0	48.9	36.6	259.89116
20	-31.576	-6.680	2720.97958	-37.9	31.1	-93.2	53.4	124.17400	0.400	-102.2	82.5	38.0	63.2	39.2	351.64992
21	-30.396	-18.620	2521.86279	-26.3	21.3	-83.5	63.8	117.18975	0.620	-101.1	72.3	43.1	52.7	18.6	311.93621
22	-30.038	-28.064	2432.60071	-11.8	11.5	-77.1	75.6	113.50108	0.693	-100.1	64.4	48.4	47.0	2.2	246.17558
23	-30.167	-36.703	2414.42651	4.3	1.3	-71.3	88.5	112.07205	0.713	-99.3	57.4	53.6	45.8	-12.6	226.37333
24	-30.733	-45.395	2459.53021	19.8	-4.4	-64.9	11.9	112.95174	0.682	-98.7	51.0	58.8	48.8	-27.2	227.94877
25	-21.390	-44.426	2278.47717	26.7	-6.4	-67.6	13.0	105.74164	0.837	-94.4	47.6	58.3	35.0	-19.4	284.23308
26	-13.731	-44.036	2178.84552	40.1	-1.8	-72.4	15.6	101.63134	0.931	-90.1	45.4	58.2	23.8	-15.7	232.13740
27	-6.876	-43.941	2133.84204	68.9	0.1	-78.6	21.9	99.13482	0.982	-85.8	44.1	58.3	16.1	-14.6	207.77993
28	-1.204	-44.030	2130.79425	107.2	1.6	-84.8	37.4	97.94574	0.996	-82.1	43.5	58.7	15.5	-15.3	171.80571

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TAB NO 2

ATLAS PHOTO NO 2

POD SEQUENCE NO 10

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										1011.119	2086.35226	-3.322	-35.712	3821.808	1.938	-74.728	117.026
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	ALPHA	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-12.175	-17.386	2273.19089	-8.5	7.1	-76.1	75.4	103.66773	0.899	-93.1	70.7	38.2	35.5	31.6	0	0-1	
2	-13.099	-30.155	2146.19238	-26.2	5.2	-78.9	63.8	101.99633	0.938	-90.1	58.5	47.4	20.3	9.2	378.38702	1-2	
3	-6.582	-37.266	2092.64862	27.8	2.0	-80.5	78.0	98.31562	0.998	-85.5	50.6	53.0	6.6	-2.7	289.72069	2-3	
4	-6.251	-30.691	2102.54904	-56.4	3.8	-81.8	51.6	99.45919	0.988	-85.1	57.1	47.6	10.6	9.3	198.15344	3-4	
5	-5.898	-23.794	2156.44028	-74.2	5.4	-82.6	34.8	101.50721	0.936	-84.6	63.9	42.3	21.9	21.6	208.02122	4-5	
6	-12.883	-22.902	2204.19006	-49.2	8.4	-81.2	48.2	104.25703	0.884	-90.1	65.5	42.0	28.3	22.1	213.24130	5-6	
7	-20.689	-21.414	2311.13550	-34.7	12.9	-81.0	57.3	106.63889	0.787	-95.7	68.0	42.3	38.8	21.1	240.32999	6-7	
8	-20.714	-29.361	2243.96268	-16.4	7.3	-77.0	70.8	106.14789	0.846	-95.2	60.7	47.7	32.6	7.2	225.16302	7-8	
9	-20.937	-36.830	2230.96490	5.9	1.6	-72.8	86.4	105.01170	0.862	-94.8	54.1	53.1	31.3	-6.1	211.51772	8-9	
10	-13.380	-37.041	2135.46286	9.8	1.8	-76.1	83.7	101.00764	0.953	-90.1	43.5	58.7	15.4	-15.2	228.97716	9-10	
11	-6.582	-37.266	2092.64862	27.8	2.0	-80.5	78.0	98.31562	0.998	-85.5	50.6	53.0	6.6	-2.7	206.00074	10-11	
12	-1.258	-43.926	2120.67920	107.1	1.6	-84.8	36.5	97.48091	0.997	-82.1	43.6	58.7	15.4	-15.2	197.83033	11-12	
13	-0.952	-37.480	2090.57816	146.1	2.3	-84.9	67.4	95.84192	0.984	-81.5	50.0	53.5	5.4	-3.6	195.41943	12-13	
14	-0.575	-31.027	2100.55734	-117.5	2.9	-84.7	33.5	98.15624	0.999	-80.8	56.4	48.2	9.9	8.0	195.76373	13-14	
15	-0.111	-24.263	2153.41397	-102.5	3.2	-84.3	18.1	100.20476	0.950	-79.9	63.2	42.9	21.4	20.0	205.36287	14-15	
16	0.479	-16.764	2258.22641	-98.0	3.4	-83.3	10.9	103.61023	0.857	-78.8	70.7	37.8	34.0	32.5	227.83776	15-16	
17	-5.504	-16.128	2263.85654	-79.8	6.8	-83.1	24.4	105.06346	0.842	-84.0	71.5	37.0	34.6	34.5	182.24510	16-17	
18	-12.742	-14.746	2320.97476	-61.3	11.5	-83.5	36.8	108.24740	0.784	-90.2	73.4	36.7	39.6	35.8	223.10190	17-18	
19	-20.931	-12.215	2449.50317	-47.5	18.4	-85.8	46.2	113.78261	0.673	-96.3	76.6	37.0	48.9	36.5	258.64132	18-19	
20	-31.476	-6.787	2707.63223	-37.9	31.0	-93.1	53.4	124.17980	0.470	-102.2	82.5	38.0	63.0	39.2	351.64992	19-20	
21	-30.309	-18.641	2510.19223	-26.3	21.2	-83.5	63.7	116.64743	0.621	-101.1	72.3	43.1	52.6	18.6	309.97887	20-21	
22	-29.953	-28.032	2421.38962	-11.9	11.5	-77.1	75.5	112.97780	0.694	-100.1	64.4	48.4	47.0	2.3	246.17558	21-22	
23	-30.079	-36.624	2403.07086	4.2	1.4	-71.3	88.4	111.94461	0.714	-99.3	57.4	53.6	45.8	-12.5	225.33642	22-23	
24	-30.638	-45.263	2447.44772	19.7	-9.2	-65.0	11.7	111.99852	0.684	-98.7	51.0	58.8	48.7	-27.0	226.35235	23-24	
25	-21.348	-44.313	2267.75598	26.6	-4.4	-67.7	12.8	105.24390	0.838	-94.4	47.6	58.3	34.9	-19.2	282.54955	24-25	
26	-13.731	-43.930	2168.70071	40.0	-1.7	-72.4	15.4	101.15811	0.932	-90.1	45.5	58.2	23.7	-15.6	231.00188	25-26	
27	-6.903	-43.837	2123.85410	68.6	0.1	-78.6	21.5	98.67088	0.982	-85.8	44.2	58.3	16.1	-14.5	206.81996	26-27	
28	-1.258	-43.926	2120.67920	107.1	1.6	-84.8	36.5	97.48091	0.997	-82.1	43.6	58.7	15.4	-15.2	170.99782	27-28	

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TAB NO 3 ATLAS PHOTO NO 3 POD SEQUENCE NO 12

JULY 31, 1964 13 HR 9 MIN 2 SEC 801 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				1005.999		2076.77878	-3.340	-35.677	3812.234	1.939	-74.701	117.021				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.166	-17.404	2262.92722	-8.6	7.1	-76.1	75.3	103.20365	0.899	-93.1	70.7	38.2	35.4	31.6	0.	0-1
2	-13.099	-30.117	2136.58743	-26.3	5.2	-78.9	63.7	101.53986	0.938	-90.1	58.5	47.4	20.3	9.3	376.17816	1-2
3	-6.611	-37.197	2084.07217	27.2	2.0	-80.5	77.7	97.86677	0.998	-85.5	50.7	53.0	6.6	-2.6	288.44616	2-3
4	-6.282	-30.651	2093.06445	-56.3	3.8	-81.7	51.6	99.01049	0.987	-85.1	57.1	47.7	10.6	9.3	197.25903	3-4
5	-5.930	-23.784	2146.74994	-74.1	5.4	-82.6	34.9	101.05094	0.936	-84.6	63.9	42.3	21.9	21.6	207.09308	4-5
6	-12.884	-22.896	2194.36273	-49.2	8.4	-81.2	48.2	103.79219	0.884	-90.1	65.5	42.0	28.3	22.1	212.30284	5-6
7	-20.654	-21.417	2300.75272	-34.7	12.8	-81.0	57.3	108.34997	0.787	-95.7	68.0	42.3	38.8	21.1	239.21848	6-7
8	-20.679	-29.327	2233.86478	-16.5	7.3	-77.0	70.7	105.67018	0.846	-95.2	60.8	47.7	32.6	7.2	224.15436	7-8
9	-20.899	-36.760	2220.76094	5.8	1.6	-72.9	86.3	104.53128	0.863	-94.8	54.1	53.1	31.3	-6.0	210.56709	8-9
10	-13.378	-36.972	2125.75922	9.6	1.8	-76.1	83.5	100.54865	0.953	-90.1	52.0	52.9	18.4	-3.2	227.90459	9-10
11	-6.611	-37.197	2084.07217	27.2	2.0	-80.5	77.7	97.86677	0.998	-85.5	50.7	53.0	6.6	-2.6	205.07441	10-11
12	-1.312	-43.824	2110.59012	106.9	1.6	-84.7	35.7	97.01725	0.997	-82.1	43.7	58.7	15.3	-15.1	256.58346	11-12
13	-1.006	-37.410	2080.87128	146.2	2.3	-84.8	67.2	95.38432	0.984	-81.5	50.1	53.5	5.3	-3.6	194.46294	12-13
14	-0.631	-30.987	2090.93665	-117.2	2.9	-84.7	33.7	97.70473	0.999	-80.8	56.5	48.2	9.9	8.1	194.86677	13-14
15	-0.169	-24.253	2143.58099	-102.4	3.3	-84.2	18.3	99.74695	0.950	-79.9	63.2	43.0	21.4	20.0	204.43021	14-15
16	0.418	-16.791	2247.79459	-97.9	3.4	-83.3	11.1	103.13123	0.897	-78.9	70.6	37.8	34.0	32.5	226.73567	15-16
17	-5.538	-16.154	2253.57520	-79.7	6.8	-83.1	24.5	104.58611	0.842	-84.1	71.5	37.0	34.5	34.5	181.41512	16-17
18	-12.764	-14.779	2310.49570	-61.2	11.5	-83.5	36.8	107.75866	0.785	-90.2	71.3	36.7	39.6	35.8	222.10592	17-18
19	-20.895	-12.266	2438.25873	-47.5	18.3	-85.8	46.2	113.26045	0.674	-76.3	76.5	37.0	48.8	36.4	257.37178	18-19
20	-31.374	-6.402	2694.11441	-37.9	30.8	-93.0	53.4	123.56012	0.472	-102.2	82.4	38.0	62.9	39.0	349.19381	19-20
21	-30.222	-18.668	2498.43198	-26.3	21.2	-83.4	63.7	116.10094	0.623	-101.1	72.3	43.1	52.5	18.5	307.96190	20-21
22	-29.869	-28.006	2410.13522	-11.9	11.5	-77.2	75.4	112.45254	0.695	-100.1	64.4	48.4	46.9	2.3	244.99179	21-22
23	-29.992	-36.551	2391.71014	4.1	1.4	-71.4	88.3	111.01703	0.715	-99.3	57.4	53.6	45.7	-12.4	224.29437	22-23
24	-30.542	-45.137	2435.46323	19.6	-9.1	-65.1	11.6	111.44717	0.685	-98.6	51.1	58.8	48.6	-26.8	225.16688	23-24
25	-21.307	-44.204	2257.06003	26.5	-4.3	-67.8	12.6	104.74737	0.839	-94.4	47.7	58.4	34.9	-19.1	280.87693	24-25
26	-13.776	-43.828	2158.57831	39.8	-1.7	-72.5	15.1	100.68593	0.932	-90.1	45.6	58.2	23.7	-15.6	229.86960	25-26
27	-6.930	-43.737	2113.88931	68.4	0.1	-78.6	21.0	98.20799	0.983	-85.8	44.4	58.4	15.9	-14.4	205.86230	26-27
28	-1.312	-43.824	2110.59012	106.9	1.6	-84.7	35.7	97.01725	0.997	-82.1	43.7	58.7	15.3	-15.1	170.19193	27-28

TAB NO 4 ATLAS PHOTO NO 4 POD SEQUENCE NO 14

JULY 31, 1964 13 HR 9 MIN 7 SEC 921 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				1070.879			2067.19849	-3.358	-35.641	3802.654	1.941	-74.673	117.017			
PHOTO DATA																
P1	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.157	-17.422	2252.65694	-8.7	7.1	-76.2	75.2	102.73901	0.899	-93.1	70.7	38.2	35.4	31.6	0.	0-1
2	-13.099	-30.080	2126.96899	-26.3	5.2	-78.9	63.7	101.08275	0.938	-90.1	58.6	47.4	20.3	9.3	375.19682	1-
3	-6.619	-37.129	2073.49100	26.7	2.0	-80.5	77.5	97.47194	0.998	-85.5	50.8	53.1	6.6	-2.5	287.16910	2-3
4	-6.312	-30.613	2083.56830	-56.2	3.8	-81.7	51.6	98.56126	0.987	-85.1	57.2	47.7	10.7	9.4	196.36361	3-4
5	-5.962	-23.776	2137.04105	-74.0	5.4	-82.6	35.0	100.59383	0.936	-84.6	63.9	42.3	21.9	21.6	206.16183	4-5
6	-12.885	-22.891	2184.51425	-49.2	8.4	-81.2	48.3	103.32635	0.884	-90.1	65.5	42.0	28.3	22.1	211.36198	5-6
7	-20.619	-21.421	2290.34567	-34.7	12.8	-81.0	57.3	107.85990	0.787	-95.7	68.0	42.3	38.7	21.1	238.10355	6-7
8	-20.644	-29.293	2223.75156	-16.5	7.3	-77.1	70.7	105.19176	0.846	-95.2	60.8	47.7	32.6	7.2	223.14123	7-8
9	-20.862	-36.691	2210.55023	5.7	1.6	-72.9	86.2	104.05057	0.863	-94.8	54.2	53.1	31.2	-6.0	209.61508	8-9
10	-13.376	-36.705	2116.04941	9.5	1.8	-76.2	83.4	100.08936	0.953	-90.1	52.1	52.9	18.4	-3.1	226.83130	9-10
11	-6.639	-37.129	2073.49100	26.7	2.0	-80.5	77.5	97.47194	0.998	-85.5	50.8	53.1	6.6	-2.5	204.14736	10-11
12	-1.365	-43.724	2100.50610	106.8	1.6	-84.6	34.8	96.55381	0.998	-82.1	43.8	58.7	15.2	-15.0	255.33820	11-12
13	-1.061	-37.341	2071.16147	146.3	2.1	-84.8	66.9	94.92706	0.984	-81.5	50.1	53.5	5.2	-3.5	193.30803	12-13
14	-0.687	-30.947	2081.30637	-116.8	2.9	-84.7	33.9	97.25252	0.999	-80.8	56.5	48.2	9.9	8.1	193.96902	13-14
15	-0.227	-24.244	2133.73178	-102.2	3.3	-84.2	18.5	99.78840	0.950	-79.9	63.2	43.0	21.4	20.0	203.49469	14-15
16	0.356	-16.818	2237.33884	-97.8	3.4	-83.3	11.3	102.65117	0.858	-78.9	70.6	37.8	33.9	32.5	225.62853	15-16
17	-5.572	-16.182	2243.26700	-79.7	6.8	-83.1	24.6	104.10755	0.843	-84.1	71.5	37.0	34.5	34.4	180.98315	16-17
18	-12.746	-14.813	2299.98590	-61.2	11.5	-83.5	36.9	107.26850	0.785	-90.2	73.3	36.7	39.5	35.7	221.10642	17-18
19	-20.857	-12.319	2426.97861	-47.5	18.3	-85.8	46.2	112.73663	0.675	-96.3	76.5	37.0	48.7	36.4	256.09712	18-19
20	-31.273	-7.018	2680.56091	-37.9	30.7	-92.9	53.4	122.93880	0.475	-102.2	82.3	38.0	62.7	38.8	346.73718	19-20
21	-30.135	-18.696	2486.64502	-26.3	21.1	-83.4	63.7	115.55321	0.624	-101.1	72.2	43.2	52.4	18.5	305.93846	20-21
22	-29.784	-27.980	2398.86523	-12.0	11.4	-77.2	75.4	111.92657	0.696	-100.1	64.4	48.4	46.9	2.4	243.80223	21-22
23	-29.904	-36.479	2380.34521	4.1	1.4	-71.5	88.2	110.48930	0.716	-99.3	57.5	53.7	45.6	-12.3	223.25062	22-23
24	-30.446	-45.012	2423.37033	19.5	-9.0	-65.2	11.4	110.89639	0.687	-98.6	51.1	58.8	48.5	-26.7	223.98582	23-24
25	-21.265	-44.097	2246.36777	26.4	-4.3	-67.9	12.4	104.25103	0.840	-94.4	47.8	58.4	34.8	-19.0	279.21042	24-25
26	-13.721	-43.727	2148.45831	39.6	-1.7	-72.6	14.8	100.21387	0.933	-90.1	45.7	58.2	23.6	-15.5	228.73829	25-26
27	-6.957	-43.638	2103.92767	68.2	0.1	-78.6	20.6	97.74525	0.983	-85.8	44.4	58.4	15.9	-14.4	204.90478	26-27
28	-1.365	-43.724	2100.50610	106.8	1.6	-84.6	34.8	96.55381	0.998	-82.1	43.8	58.7	15.2	-15.0	169.38644	27-28

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JULY 31, 1964 13 HR 9 MIN 13 SEC 41 MS

TAB NO 5

ATLAS PHOTO NO 5

POD SEQUENCE NO 16

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
PHOTO DATA				995.759		2057.61115	-3.376	-35.606	3793.066	1.943	-74.646	117.012				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.148	-17.439	2242.37372	-8.8	7.1	-76.2	75.1	102.27399	0.900	-93.1	70.7	38.2	35.4	31.6	0.	0-1
2	-13.098	-30.043	2117.34268	-26.4	5.2	-78.9	63.6	100.62526	0.938	-90.1	58.6	47.5	20.3	9.3	373.61036	1-2
3	-6.668	-37.061	2063.90353	26.1	2.0	-80.5	77.3	96.96887	0.998	-85.5	50.8	53.1	6.6	-2.5	285.89082	2-3
4	-6.342	-30.574	2074.06531	-56.1	3.8	-81.7	51.7	98.11170	0.987	-85.1	57.2	47.7	10.7	9.4	195.46764	3-4
5	-5.994	-23.768	2127.32544	-73.9	5.4	-82.5	35.1	100.13639	0.936	-84.6	63.9	42.3	21.9	21.6	205.22995	4-5
6	-12.886	-22.886	2174.65802	-49.1	8.4	-81.2	48.3	102.86015	0.885	-90.1	65.5	42.0	28.3	22.1	210.42027	5-6
7	-20.584	-21.425	2279.93097	-34.8	12.8	-81.0	57.2	107.36947	0.788	-95.7	68.0	42.3	38.7	21.1	236.98810	6-7
8	-20.608	-29.259	2213.63031	-16.6	7.3	-77.1	70.6	104.71296	0.847	-95.2	60.8	47.7	32.6	7.3	222.12752	7-8
9	-20.824	-36.622	2200.33240	5.6	1.7	-73.0	86.0	103.56952	0.863	-94.8	54.2	53.1	31.2	-5.9	208.66243	8-9
10	-13.373	-36.837	2106.33234	9.3	1.8	-76.2	83.2	99.62973	0.953	-90.1	52.2	52.9	18.4	-3.1	225.75749	9-10
11	-6.668	-37.061	2063.90353	26.1	2.0	-80.5	77.3	96.96887	0.998	-85.5	50.8	53.1	6.6	-2.5	203.21949	10-11
12	-1.419	-43.623	2090.41895	106.7	1.5	-84.6	33.9	96.09023	0.998	-82.1	43.9	58.7	15.1	-14.9	254.09338	11-12
13	-1.115	-37.272	2061.44681	146.5	2.3	-84.8	66.7	94.46987	0.984	-81.5	50.2	53.5	5.2	-3.4	192.55337	12-13
14	-0.743	-30.908	2071.67059	-116.4	2.9	-84.6	34.1	96.80026	0.999	-80.8	56.6	48.3	9.9	8.1	193.07083	13-14
15	-0.286	-24.236	2123.87726	-102.0	3.3	-84.2	18.8	98.82962	0.950	-79.9	63.2	43.0	21.4	20.0	202.55577	14-15
16	0.294	-16.866	2226.87970	-97.7	3.5	-83.2	11.4	102.17096	0.858	-78.9	70.6	37.8	33.9	32.4	224.52192	15-16
17	-5.606	-16.210	2232.95346	-79.6	6.9	-83.0	24.7	103.62874	0.843	-84.1	71.4	37.0	34.5	34.4	179.75102	16-17
18	-12.747	-14.867	2289.47000	-61.2	11.5	-83.5	36.9	106.77806	0.786	-90.2	73.3	36.7	39.5	35.7	220.10609	17-18
19	-20.820	-12.371	2415.69397	-47.5	18.2	-85.8	46.3	112.21260	0.676	-96.3	76.4	37.0	48.6	36.3	254.82311	18-19
20	-31.171	-7.133	2667.02209	-37.9	30.5	-92.8	53.4	122.31814	0.477	-102.2	82.2	38.0	62.6	38.7	344.29651	19-20
21	-30.047	-18.724	2474.85516	-26.4	21.0	-83.4	53.6	115.00534	0.625	-101.1	72.2	43.2	52.3	18.5	303.92792	20-21
22	-29.699	-27.955	2387.59006	-12.0	11.4	-77.2	75.2	111.40037	0.697	-100.1	65.5	56.4	44.8	2.4	222.51118	21-22
23	-29.816	-36.406	2368.97647	4.0	1.5	-71.6	88.1	109.96138	0.717	-99.3	57.5	53.7	45.5	-12.2	222.20652	22-23
24	-30.351	-44.887	2411.33890	19.4	-8.9	-65.4	11.3	110.34567	0.688	-98.6	51.2	58.9	48.4	-26.5	222.80655	23-24
25	-21.223	-43.989	2235.67075	26.3	-4.2	-68.0	12.2	103.75447	0.840	-94.4	47.9	58.4	34.7	-18.4	277.54830	24-25
26	-13.716	-43.626	2138.33282	39.5	-1.7	-72.6	14.6	99.74155	0.933	-90.1	45.8	58.2	23.6	-15.4	227.60690	25-26
27	-6.984	-43.538	2093.96140	68.0	0.1	-78.6	20.2	97.28230	0.983	-85.8	44.5	58.4	15.9	-14.3	203.94665	26-27
28	-1.419	-43.623	2090.41895	106.7	1.5	-84.6	33.9	96.09023	0.998	-82.1	43.9	58.7	15.1	-14.9	168.58076	27-28

TAB NO 6

ATLAS PHOTO NO 6

POD SEQUENCE NO 18

JULY 31, 1964 13 HR 9 MIN 18 SEC 160 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
PHOTO DATA				990.639		2048.01675	-3.394	-35.570	3783.472	1.944	-74.618	117.007				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.139	-17.457	2232.08359	-8.8	7.1	-76.2	75.0	101.80908	0.900	-93.1	70.7	38.2	35.3	31.5	0.	0-1
2	-13.099	-30.011	2107.69724	-26.4	5.2	-78.9	63.6	100.16687	0.938	-90.1	58.6	47.5	20.3	9.3	372.17288	1-2
3	-6.698	-36.998	2054.32242	25.6	2.1	-80.5	77.1	96.52148	0.998	-85.5	50.9	53.1	6.6	-2.4	284.60721	2-3
4	-6.373	-30.540	2064.53537	-56.0	3.8	-81.7	51.7	97.66088	0.987	-85.1	57.3	47.7	10.7	9.4	194.56906	3-4
5	-6.027	-23.765	2117.54584	-73.8	5.4	-82.5	35.2	99.67597	0.936	-84.6	63.9	42.3	21.9	21.6	204.28436	4-5
6	-12.888	-22.887	2164.74323	-49.1	8.4	-81.2	48.3	102.39117	0.885	-90.2	65.5	42.0	28.3	22.0	209.47423	5-6
7	-20.551	-21.434	2269.46207	-34.8	12.8	-81.0	57.3	106.87647	0.788	-95.7	68.0	42.3	38.6	21.0	235.86979	6-7
8	-20.575	-29.231	2203.49991	-16.6	7.3	-77.1	70.5	104.23373	0.847	-95.2	60.8	47.7	32.5	7.3	221.09755	7-8
9	-20.788	-36.558	2190.14612	5.5	1.7	-73.0	85.9	103.08998	0.864	-94.8	54.3	53.1	31.1	-5.9	207.70833	8-9
10	-13.373	-36.773	2096.63168	9.1	1.8	-76.2	83.1	99.17088	0.953	-90.1	52.2	52.9	18.4	-3.0	224.69207	9-10
11	-6.698	-36.998	2054.32242	25.6	2.1	-80.5	77.1	96.52148	0.998	-85.5	50.9	53.1	6.6	-2.4	202.29476	10-11
12	-1.474	-43.528	2080.36594	106.5	1.5	-84.5	33.1	95.62815	0.998	-82.1	44.0	58.8	15.0	-14.8	252.85444	11-12
13	-1.171	-37.208	2051.73172	146.5	2.3	-84.7	66.6	94.01338	0.984	-81.5	50.3	53.6	5.1	-3.4	191.60566	12-13
14	-0.801	-30.873	2062.00150	-116.0	2.9	-84.6	34.3	96.34378	0.999	-80.8	56.6	48.3	9.9	8.1	192.16940	13-14
15	-0.345	-24.232	2113.95245	-101.9	3.3	-84.1	19.0	98.36763	0.950	-79.9	63.2	43.0	21.3	20.0	201.60867	14-15
16	0.231	-16.880	2216.30106	-97.6	3.5	-83.2	11.6	101.68539	0.859	-78.9	70.6	37.8	33.8	32.4	223.38511	15-16
17	-5.642	-16.244	2222.52649	-79.3	6.9	-83.5	24.8	103.14470	0.843	-84.1	71.4	37.0	34.4	34.3	178.90974	16-17
18	-12.750	-14.888	2278.84222	-61.1	11.5	-83.5	37.0	106.28237	0.786	-90.2	73.2	36.7	39.4	35.6	219.09606	17-18
19	-20.784	-12.431	2404.29153	-47.4	18.2	-85.7	46.3	121.69302	0.677	-96.3	76.4	37.1	48.6	36.2	253.53683	18-19
20	-31.071	-7.257	2653.34637	-37.9	30.4	-82.7	53.4	121.69109	0.477	-102.2	82.1	38.1	62.4	38.5	341.83538	19-20
21	-29.961	-18.758	2463.01703	-26.4	20.9	-83.4	63.6	114.45522	0.626	-100.1	72.1	43.2	52.2	18.5	301.85615	20-21
22	-29.616	-27.936	2376.32373	-12.0	11.4	-77.2	75.2	110.87463	0.698	-100.1	64.3	48.4	46.7	2.5	241.40196	21-22
23	-29.732	-36.340	2357.66898	4.0	1.5	-71.6	88.0	109.43641	0.718	-99.3	57.5	53.7	45.4	-12.1	221.64863	22-23
24	-30.259	-44.769	2399.43265	19.4	-8.7	-65.5	11.2	109.80080	0.690	-98.6	51.2	58.9	48.3	-26.4	221.64863	23-24
25	-21.184	-43.887	2225.05099	26.2	-4.2	-68.1	12.1	103.26153	0.841	-94.4	48.0	58.4	34.7	-18.8	275.92435	24-25
26	-13.714	-43.530	2128.26215	39.3	-1.7	-72.7	14.3	99.27176	0.933	-90.1	45.9	58.2	23.5	-15.3	226.49074	25-26
27	-7.012	-43.444	2084.03677	67.7	0.2	-78.6	19.8	96.82122	0.984	-85.8	44.6	58.4	15.8	-14.2	202.99593	26-27
28	-1.474	-43.528	2080.36594	106.5	1.5	-84.5	33.1	95.62815	0.998	-82.1	44.0	58.8	15.0	-14.8	167.77838	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 9 MIN 33 SEC 520 MS

TAB NO 9

ATLAS PHOTO NO 9

POD SEQUENCE NO 24

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				975.279				2019.19110	-3.449	-35.463	3754.646	1.949	-74.535	116.993		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.113	-17.510	2201.15948	-9.0	7.1	-76.3	74.8	100.41255	0.900	-93.1	70.6	38.3	35.2	31.4	0.	0-
2	-13.103	-29.912	2078.72842	-26.5	5.2	-79.0	63.5	98.79015	0.938	-90.1	58.7	47.5	20.4	9.4	367.76918	1-2
3	-6.788	-36.805	2025.53947	24.2	2.1	-80.5	76.6	95.17770	0.998	-85.5	51.1	53.1	6.7	-2.3	280.75384	2-3
4	-6.468	-30.436	2035.91425	-55.6	3.8	-81.7	51.8	96.30692	0.987	-85.1	57.4	47.8	10.8	9.5	191.87081	3-4
5	-6.127	-23.753	2088.19043	-73.5	5.5	-82.5	35.6	98.29391	0.936	-84.7	64.0	42.4	21.9	21.5	201.44934	4-5
6	-12.895	-22.885	2134.98264	-49.0	8.4	-81.2	48.4	100.98346	0.885	-90.2	65.5	42.1	28.3	22.0	206.63470	5-6
7	-20.450	-21.459	2238.05020	-34.8	12.7	-81.1	57.3	105.39723	0.789	-95.7	67.9	42.4	38.5	21.0	232.51912	6-7
8	-20.473	-29.142	2173.08231	-16.7	7.3	-77.2	70.4	102.79481	0.848	-95.2	60.9	47.8	32.5	7.3	218.01269	7-8
9	-20.681	-36.363	2159.55087	5.3	1.7	-73.2	85.6	101.64963	0.865	-94.8	54.4	53.2	31.0	-5.7	204.84423	8-9
10	-13.372	-36.581	2067.48840	8.7	1.9	-76.3	82.6	97.79234	0.953	-90.1	52.4	53.0	18.4	-2.9	221.49459	9-10
11	-6.788	-36.805	2025.53947	24.2	2.1	-80.5	76.6	95.17770	0.998	-85.5	51.1	53.1	6.7	-2.3	199.51692	10-11
12	-1.640	-43.239	2050.17047	106.1	1.5	-84.4	30.7	94.24028	1.000	-82.2	44.3	58.8	14.7	-14.6	249.13633	11-12
13	-1.339	-37.012	2022.55217	146.5	2.3	-84.6	66.2	92.64356	0.984	-81.5	50.5	53.6	4.9	-3.2	188.76034	12-13
14	-0.973	-30.766	2032.96783	-114.9	2.9	-84.5	35.1	94.97503	0.999	-80.8	56.7	48.3	9.8	8.2	189.46313	13-14
15	-0.525	-24.219	2084.16696	-101.4	3.4	-84.1	19.7	96.98114	0.951	-79.9	63.2	43.1	21.3	19.9	198.76066	14-15
16	0.041	-16.978	2184.58383	-97.3	3.6	-83.2	12.2	100.22945	0.861	-78.9	70.5	37.9	33.6	32.3	219.98933	15-16
17	-5.748	-16.343	2191.25775	-79.3	6.9	-83.0	25.2	101.69313	0.845	-84.1	71.3	37.1	34.3	34.2	176.38842	16-17
18	-12.758	-15.006	2246.97556	-61.0	11.5	-83.5	37.2	104.79608	0.788	-90.2	73.1	36.8	39.3	35.4	216.06843	17-18
19	-20.675	-12.604	2370.13019	-47.4	18.0	-85.6	46.4	110.09642	0.680	-96.2	76.2	37.1	48.3	36.0	249.69581	18-19
20	-30.771	-7.616	2612.53171	-37.9	29.9	-92.3	53.4	119.81971	0.487	-102.2	81.8	38.1	62.0	38.0	334.59144	19-20
21	-29.704	-18.855	2427.54880	-26.4	20.6	-83.4	63.6	112.80703	0.630	-101.1	72.0	43.2	52.0	18.3	295.76461	20-21
22	-29.369	-27.872	2342.52805	-12.2	11.3	-77.4	75.0	105.27527	0.702	-100.1	64.3	48.5	46.5	2.6	237.78649	21-22
23	-29.478	-36.137	2323.73651	3.8	1.6	-71.8	87.7	107.86099	0.721	-99.3	57.6	53.8	45.2	-11.8	218.02754	22-23
24	-29.984	-44.414	2363.71332	19.2	-8.4	-65.8	10.8	108.16607	0.694	-98.6	51.3	58.9	47.9	-25.9	218.18046	23-24
25	-21.066	-43.579	2193.15424	25.9	-4.0	-68.3	11.6	101.78089	0.843	-94.4	48.2	58.5	34.5	-18.5	271.07740	24-25
26	-13.706	-43.239	2098.00580	38.8	-1.6	-72.9	13.6	97.86031	0.934	-90.1	46.2	58.3	23.4	-15.1	223.14224	25-26
27	-7.709	-43.158	2054.22031	67.0	0.2	-78.6	18.6	95.43601	0.985	-85.8	44.9	58.4	15.6	-14.0	200.13930	26-27
28	-1.640	-43.239	2050.17047	106.1	1.5	-84.4	30.7	94.24028	1.000	-82.2	44.3	58.8	14.7	-14.6	165.36880	27-28

JULY 31, 1964 13 HR 9 MIN 38 SEC 640 MS

TAB NO 10

ATLAS PHOTO NO 10

POD SEQUENCE NO 26

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				970.159		2009.56824	-3.467	-35.426	3745.024	1.951	-74.507	116.988				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.104	-17.528	2190.83337	-9.1	7.1	-76.4	74.7	99.94654	0.900	-93.1	70.6	38.3	35.2	31.4	0.	0-1
2	-13.104	-29.875	2069.07190	-26.6	5.2	-79.0	63.4	98.33123	0.937	-90.1	58.8	47.5	20.4	9.4	366.18988	1-2
3	-6.818	-36.737	2015.92729	23.6	2.1	-80.5	76.4	94.72856	0.998	-85.5	51.2	53.2	6.7	-2.3	279.47183	2-3
4	-6.500	-30.397	2026.37500	-55.5	3.8	-81.7	51.9	95.85565	0.987	-85.1	57.4	47.8	10.9	9.5	190.97178	3-4
5	-6.160	-23.745	2078.42990	-73.4	5.5	-82.5	35.7	97.83436	0.936	-84.7	64.0	42.4	21.9	21.5	200.51160	4-5
6	-12.897	-22.881	2125.08755	-49.0	8.4	-81.2	48.5	100.51541	0.885	-90.2	65.5	42.1	28.3	22.0	205.69072	5-6
7	-20.416	-21.463	2227.61139	-34.8	12.7	-81.1	57.2	104.90566	0.790	-95.7	67.9	42.4	38.5	20.9	231.40777	6-7
8	-20.439	-29.108	2162.94431	-16.8	7.3	-77.3	70.3	102.31521	0.848	-95.2	60.9	47.8	32.5	7.4	216.99501	7-8
9	-20.645	-36.294	2149.33029	5.3	1.7	-73.3	85.5	101.16845	0.865	-94.8	54.5	53.2	31.0	-5.6	203.89028	8-9
10	-13.371	-36.513	2057.75339	8.5	1.9	-76.4	82.5	97.33185	0.953	-90.1	52.5	53.0	18.4	-2.9	220.42637	9-10
11	-6.818	-36.737	2015.92729	23.6	2.1	-80.5	76.4	94.72856	0.998	-85.5	51.2	53.2	6.7	-2.3	198.58867	10-11
12	-1.695	-43.139	2040.07376	105.9	1.5	-84.3	28.1	93.76402	1.000	-82.2	44.4	58.8	14.6	-14.5	247.89367	11-12
13	-1.395	-36.943	2012.81111	146.6	2.3	-84.5	66.0	92.18639	0.983	-81.5	50.6	53.6	4.8	-3.2	187.80779	12-13
14	-1.031	-30.727	2023.29410	-114.5	2.9	-84.4	35.3	94.52090	0.999	-80.8	56.8	48.3	9.8	8.2	188.56169	13-14
15	-0.585	-24.211	2074.26599	-101.2	3.4	-84.0	19.9	96.52020	0.951	-80.0	63.3	43.1	21.2	19.9	197.81886	14-15
16	-0.022	-17.006	2174.07379	-97.2	3.7	-83.2	12.4	99.74690	0.861	-78.9	70.4	37.9	33.6	32.2	218.87720	15-16
17	-5.783	-16.371	2180.89429	-79.2	6.9	-83.0	25.3	101.21198	0.845	-84.1	71.3	37.1	34.2	34.1	175.55306	16-17
18	-12.761	-15.040	2236.41742	-60.9	11.5	-83.4	37.3	104.30363	0.788	-90.2	73.1	36.8	39.2	35.4	215.06610	17-18
19	-20.639	-12.657	2358.82687	-47.4	18.0	-85.6	46.4	109.57148	0.681	-96.2	76.1	37.1	48.3	35.9	248.43146	18-19
20	-30.672	-7.726	2599.09634	-37.9	29.8	-92.2	53.4	119.20374	0.489	-102.2	81.7	38.1	61.8	37.8	332.25037	19-20
21	-29.619	-18.882	2415.78345	-26.4	20.5	-83.4	63.5	112.26030	0.631	-101.0	72.0	43.3	51.9	18.3	293.81554	20-21
22	-29.286	-27.847	2331.27408	-12.2	11.3	-77.4	75.0	108.77236	0.702	-100.1	64.3	48.5	46.4	2.6	236.60104	21-22
23	-29.393	-36.065	2312.40665	3.7	1.7	-71.9	87.6	107.33488	0.722	-99.3	57.6	53.8	45.1	-11.7	216.98536	22-23
24	-29.891	-44.291	2351.76334	19.1	-8.3	-65.9	10.7	107.61904	0.696	-98.6	51.4	58.9	47.8	-25.8	217.01858	23-24
25	-21.026	-43.472	2182.47852	25.8	-4.0	-68.4	11.4	101.28529	0.844	-94.4	48.3	58.5	34.4	-18.4	269.45959	24-25
26	-13.703	-43.138	2087.88068	38.7	-1.6	-72.9	13.4	97.38798	0.935	-90.1	46.3	58.3	23.3	-15.0	222.02098	25-26
27	-7.127	-43.059	2044.24597	66.8	0.2	-78.7	18.2	94.97265	0.985	-85.8	45.0	58.5	15.6	-13.9	199.18284	26-27
28	-1.695	-43.139	2040.07376	105.9	1.5	-84.3	28.1	93.76402	1.000	-82.2	44.4	58.8	14.6	-14.5	164.56301	27-28

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JULY 31, 1964 13 HR 9 MIN 43 SEC 760 MS										TAB NO 11	ATLAS PHOTO NO 11				POD SEQUENCE NO 28			
TRAJECTORY DATA										SEC TO IMPACT 965.039	ALT 1999.93808	LAT -3.486	LON -35.390	R 3735.393	V 1.953	PTH -74.478	AZ 116.983	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-12.095	-17.546	2180.49811	-9.2	7.1	-76.4	74.6	99.48011	0.900	-93.1	70.6	38.3	35.2	31.4	0.	0-1		
2	-13.105	-29.838	2059.40698	-26.6	5.2	-79.0	63.4	97.87191	0.937	-90.1	58.8	47.6	20.4	9.4	364.60567	1-2		
3	-6.848	-36.669	2006.30853	23.1	2.1	-80.4	76.2	94.27919	0.998	-85.5	51.3	53.2	6.7	-2.2	278.18872	2-3		
4	-6.531	-30.359	2016.82852	-55.4	3.9	-81.6	51.9	95.40404	0.986	-85.1	57.5	47.8	10.9	9.5	190.07214	3-4		
5	-6.193	-23.738	2068.66226	-73.3	5.5	-82.5	35.8	97.37447	0.936	-84.7	64.0	42.4	21.9	21.5	199.57329	4-5		
6	-12.899	-22.876	2115.18427	-49.0	8.4	-81.2	48.5	100.04698	0.885	-90.2	65.5	42.1	28.2	22.0	204.74577	5-6		
7	-20.362	-21.467	2217.16415	-34.8	12.6	-81.1	57.2	104.41369	0.790	-95.7	67.9	42.4	38.5	20.9	230.29558	6-7		
8	-20.405	-29.075	2152.79767	-16.8	7.3	-77.3	70.3	101.83521	0.858	-95.2	60.9	47.8	34.4	7.4	215.97670	7-8		
9	-20.609	-36.225	2139.10184	5.1	1.8	-73.3	85.3	100.68610	0.865	-94.8	54.5	53.2	31.0	-5.6	202.93567	8-9		
10	-13.370	-36.445	2048.01065	8.4	1.9	-76.4	82.3	96.87100	0.953	-90.1	52.5	53.0	18.3	-2.8	219.35743	9-10		
11	-6.848	-36.669	2006.30853	23.1	2.1	-80.4	76.2	94.27919	0.998	-85.5	51.3	53.2	6.7	-2.2	197.65960	10-11		
12	-1.750	-43.039	2029.97369	105.8	1.5	-84.3	27.3	93.25898	0.999	-82.2	44.5	58.8	14.5	-14.4	246.65122	11-12		
13	-1.451	-36.874	2003.06502	146.7	2.3	-84.5	65.8	91.72928	0.983	-81.5	50.6	53.6	4.7	-3.1	186.85536	12-13		
14	-1.088	-30.688	2013.61472	-114.1	2.9	-84.4	35.5	94.06671	0.999	-80.8	56.8	48.4	9.8	8.3	187.65984	13-14		
15	-0.644	-24.203	2064.35962	-101.0	3.4	-84.0	20.1	96.05901	0.951	-80.0	63.3	43.1	21.2	19.9	196.87659	14-15		
16	-0.084	-17.035	2163.56024	-97.1	3.7	-83.1	12.6	99.26419	0.862	-78.9	70.4	37.9	33.5	32.2	217.76560	15-16		
17	-5.818	-16.400	2170.52524	-79.1	7.0	-83.0	25.5	100.73058	0.846	-84.1	71.3	37.1	34.2	34.1	174.71752	16-17		
18	-12.763	-15.075	2225.85260	-60.9	11.5	-83.4	37.4	103.81087	0.789	-90.2	73.0	36.8	39.2	35.3	214.06300	17-18		
19	-20.603	-12.709	2347.51813	-47.4	18.0	-85.6	46.5	109.04628	0.681	-96.2	76.1	37.2	48.2	35.8	247.16744	18-19		
20	-30.574	-7.836	2585.67188	-37.9	29.6	-92.1	53.5	118.58827	0.491	-102.2	81.6	38.1	61.7	37.7	329.92257	19-20		
21	-29.533	-18.908	2404.01379	-26.5	20.4	-83.3	63.5	111.71337	0.633	-101.0	71.9	43.3	51.8	18.3	291.87740	20-21		
22	-29.203	-27.821	2320.01367	-12.2	11.2	-77.4	75.0	108.24686	0.703	-100.1	64.3	48.5	46.3	2.6	235.41596	21-22		
23	-29.308	-35.993	2301.07156	3.6	1.7	-71.9	87.5	106.80853	0.723	-99.3	57.6	53.8	45.0	-11.6	215.94273	22-23		
24	-29.799	-44.168	2339.81296	19.0	-8.2	-66.0	10.5	107.07201	0.697	-98.6	51.4	59.0	47.7	-25.6	215.94273	23-24		
25	-20.986	-43.165	2171.79718	25.7	-3.9	-68.5	11.2	100.78944	0.844	-94.4	48.3	58.5	34.3	-18.3	267.84520	24-25		
26	-13.700	-43.037	2077.74966	38.5	-1.6	-73.0	13.1	96.91537	0.935	-90.1	46.4	58.3	23.3	-14.9	270.89934	25-26		
27	-7.156	-42.959	2034.28663	66.5	0.2	-78.7	17.7	94.50907	0.985	-85.8	45.1	58.5	15.5	-13.8	198.22577	26-27		
28	-1.750	-43.039	2029.97369	105.8	1.5	-84.3	27.3	93.25898	0.999	-82.2	44.5	58.8	14.5	-14.4	163.75701	27-28		

JULY 31, 1964 13 HR 9 MIN 48 SEC 880 MS										TAB NO 12	ATLAS PHOTO NO 12	POD SEQUENCE NO 30					
TRAJECTORY DATA										SEC TO IMPACT 959.920	ALT 1990.30093	LAT -3.504	LON -35.353	R 3725.756	V 1.955	PTH -74.450	AZ 116.978
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-12.086	-17.563	2170.15384	-9.3	7.0	-76.4	74.5	99.01292	0.900	-93.1	70.6	38.3	35.1	31.4	0.	0-1	
2	-13.105	-29.802	2049.72501	-26.6	5.2	-79.0	63.4	97.41178	0.937	-90.2	58.8	47.6	20.4	9.4	363.05149	1-2	
3	-6.878	-36.602	1996.68417	22.6	2.1	-80.4	76.0	93.82969	0.998	-85.5	51.3	53.2	6.7	-2.1	276.90209	2-3	
4	-6.562	-30.321	2007.26854	-55.3	3.9	-81.6	51.9	94.95179	0.986	-85.1	57.5	47.8	10.9	9.5	189.17123	3-4	
5	-6.226	-23.731	2058.87280	-73.2	5.5	-82.4	35.9	96.91557	0.936	-84.7	64.0	42.4	21.9	21.5	198.63123	4-5	
6	-12.901	-22.873	2105.25458	-48.9	8.4	-81.2	48.5	99.57729	0.885	-90.2	65.5	42.2	28.2	22.0	203.79762	5-6	
7	-20.347	-21.472	2206.68488	-34.8	12.6	-81.1	57.2	104.92021	0.790	-95.7	67.9	42.5	38.4	20.9	229.17856	6-7	
8	-20.370	-29.042	2142.62988	-16.9	7.3	-77.3	70.2	101.35442	0.848	-95.2	61.0	47.8	32.4	7.4	214.95278	7-8	
9	-20.573	-36.157	2128.86234	5.0	1.8	-73.4	85.2	100.20484	0.865	-94.8	54.6	53.2	30.9	-5.5	201.97890	8-9	
10	-13.369	-36.378	2038.25943	8.2	1.9	-76.4	82.2	96.40976	0.953	-90.1	52.6	53.0	18.3	-2.7	218.28650	9-10	
11	-6.878	-36.602	1996.68417	22.6	2.1	-80.4	76.0	93.82969	0.998	-85.5	51.3	53.2	6.7	-2.1	196.72929	10-11	
12	-1.805	-42.939	2019.88004	105.6	1.5	-84.2	26.5	92.75589	0.999	-82.2	44.6	58.9	14.4	-14.3	245.41068	11-12	
13	-1.507	-36.807	1993.31633	146.8	2.3	-84.4	65.7	91.27255	0.983	-81.6	50.7	53.7	4.6	-3.0	185.90469	12-13	
14	-1.145	-30.650	2003.92493	-113.7	2.9	-84.3	35.7	93.61173	0.999	-80.8	56.8	48.4	9.8	8.3	186.75702	13-14	
15	-0.703	-24.195	2054.43497	-100.9	3.5	-84.0	20.3	95.59700	0.951	-80.0	63.3	43.1	21.2	19.9	195.93098	14-15	
16	-0.147	-17.064	2153.01926	-97.0	3.7	-83.1	12.8	98.78027	0.862	-78.9	70.4	37.9	33.5	32.2	216.64810	15-16	
17	-5.852	-16.430	2160.12424	-79.0	7.0	-83.0	25.6	100.24772	0.846	-84.1	71.2	37.1	34.2	34.1	173.87964	16-17	
18	-12.765	-15.111	2215.24969	-60.9	11.5	-83.4	37.4	103.31635	0.789	-90.2	73.0	36.8	39.2	35.3	213.05519	17-18	
19	-20.566	-12.763	2336.16269	-47.3	17.9	-85.6	46.5	108.51891	0.682	-96.2	76.0	37.2	48.1	35.8	245.89577	18-19	
20	-30.474	-7.947	2572.19073	-37.9	29.5	-92.0	53.5	117.97018	0.494	-102.2	81.4	38.2	61.5	37.5	327.58571	19-20	
21	-29.447	-18.936	2392.20438	-26.5	20.4	-83.3	63.5	111.16459	0.634	-101.0	71.9	43.3	51.7	18.3	289.92653	20-21	
22	-29.120	-27.796	2308.72794	-12.3	11.2	-77.4	74.9	107.72019	0.704	-100.1	64.3	48.5	46.3	2.7	234.22292	21-22	
23	-29.222	-35.922	2289.72458	3.6	1.8	-72.0	87.4	106.28167	0.724	-99.3	57.7	53.8	44.9	-11.5	214.89732	22-23	
24	-29.707	-44.046	2327.86700	18.9	-8.1	-66.1	10.4	106.52522	0.699	-98.6	51.5	59.0	47.6	-25.5	214.70104	23-24	
25	-20.946	-43.259	2161.11627	25.6	-3.9	-68.6	11.0	100.29363	0.845	-94.4	48.4	58.5	34.3	-18.2	266.23389	24-25	
26	-13.696	-42.937	2067.61969	38.3	-1.5	-73.0	12.8	96.44283	0.935	-90.1	46.5	58.3	23.2	-14.8	219.77775	25-26	
27	-7.184	-42.861	2024.29066	66.3	0.2	-78.7	17.3	94.04563	0.985	-85.9	45.2	58.5	15.5	-13.7	197.26830	26-27	
28	-1.805	-42.939	2019.88004	105.6	1.5	-84.2	26.5	92.75589	0.999	-82.2	44.6	58.9	14.4	-14.3	162.95156	27-28	

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JULY 31, 1964 13 HR 9 MIN 54 SEC 0 MS TAB NO 13 ATLAS PHOTO NO 13 POD SEQUENCE NO 32

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				954.800	1980.65637	-3.523	-35.316	3716.112	1.956	-74.421	116.973					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.077	-17.581	2159.80029	-9.4	7.0	-76.5	74.4	98.54530	0.900	-93.1	70.5	38.3	35.1	31.3	0.	0-1
2	-13.105	-29.766	2040.03450	-26.7	5.2	-79.0	63.3	96.95124	0.937	-90.2	58.9	47.6	20.4	9.4	361.49257	1-2
3	-6.907	-36.534	1987.05304	22.1	2.1	-80.4	75.8	93.37992	0.998	-85.5	51.4	53.2	6.7	-2.1	275.61430	2-3
4	-6.593	-30.283	1997.70114	-55.2	3.9	-81.6	51.9	94.49919	0.986	-85.1	57.5	47.8	11.0	9.6	188.26976	3-4
5	-6.258	-23.724	2049.07608	-73.1	5.5	-82.4	36.0	96.45233	0.936	-84.7	64.0	42.4	21.9	21.5	197.68851	4-5
6	-12.902	-22.869	2095.31641	-48.9	8.4	-81.2	48.6	99.10721	0.885	-90.2	65.5	42.2	28.2	21.9	202.84852	5-6
7	-20.312	-21.477	2196.19690	-34.8	12.6	-81.1	57.2	103.42632	0.791	-95.6	67.9	42.5	38.4	20.9	228.06057	6-7
8	-20.335	-29.009	2132.45319	-16.9	7.3	-77.3	70.2	100.87279	0.848	-95.2	61.0	47.8	32.4	7.4	213.92810	7-8
9	-20.536	-36.089	2118.61478	4.9	1.8	-73.4	85.1	97.22440	0.866	-94.8	54.7	53.3	30.9	-5.4	201.02141	8-9
10	-13.368	-36.311	2028.50031	8.1	1.9	-76.4	82.0	95.94813	0.953	-90.1	52.7	53.0	18.3	-2.7	217.21494	9-10
11	-6.907	-36.534	1987.05304	22.1	2.1	-80.4	75.8	93.37992	0.998	-85.5	51.4	53.2	6.7	-2.1	195.79806	10-11
12	-1.859	-42.840	2009.78281	105.4	1.5	-84.1	25.7	92.25329	0.999	-82.2	44.7	58.9	14.3	-14.2	244.17021	11-12
13	-1.562	-36.739	1983.56239	146.9	2.3	-84.4	65.5	90.81585	0.983	-81.6	50.8	53.7	4.5	-3.0	184.95407	12-13
14	-1.202	-30.611	1994.22932	-113.4	3.0	-84.3	35.9	93.15667	0.999	-80.8	56.9	48.4	9.8	8.3	185.85370	13-14
15	-0.762	-24.188	2044.50478	-100.7	3.5	-83.9	20.6	95.13472	0.952	-80.0	63.3	43.1	21.2	19.9	194.98498	14-15
16	-0.209	-17.094	2142.47455	-96.9	3.8	-83.1	13.0	98.29618	0.863	-79.0	70.3	37.9	33.4	32.1	215.53118	15-16
17	-5.887	-16.459	2149.71741	-79.0	7.0	-82.9	25.7	97.76459	0.846	-84.1	71.2	37.2	34.1	34.0	173.04135	16-17
18	-12.767	-15.147	2204.63986	-60.8	11.5	-83.4	37.5	102.82151	0.790	-90.2	73.0	36.8	39.1	35.2	212.04659	17-18
19	-20.529	-12.816	2324.80167	-47.3	17.9	-85.6	46.5	107.99128	0.683	-96.2	76.0	37.2	48.1	35.7	244.62437	18-19
20	-30.374	-8.058	2558.72040	-37.9	29.3	-91.9	53.5	117.35258	0.496	-102.2	81.3	38.2	61.4	37.4	325.26218	19-20
21	-39.341	-18.964	2380.39056	-26.5	20.3	-83.3	63.5	110.61561	0.635	-101.0	71.8	43.3	51.6	18.2	287.98658	20-21
22	-29.036	-27.772	2297.43964	-14.3	11.4	-77.5	77.9	107.05177	0.705	-100.1	64.3	48.6	46.2	2.7	233.03029	21-22
23	-29.136	-35.852	2278.37213	-18.8	-8.0	-66.2	10.2	105.97840	0.700	-98.6	51.5	59.0	47.5	-25.3	213.54527	22-23
24	-29.614	-43.925	2315.92032	18.8	-8.0	-66.2	10.2	105.97840	0.700	-98.6	51.5	59.0	47.5	-25.3	213.54527	23-24
25	-20.905	-43.153	2150.42953	25.5	-3.8	-68.7	10.8	99.79754	0.846	-94.4	48.6	58.5	34.2	-18.1	268.62611	24-25
26	-13.693	-42.837	2057.44858	38.2	-1.5	-73.1	12.3	95.96999	0.936	-90.1	46.6	58.4	23.1	-14.6	218.65557	25-26
27	-7.212	-42.763	2014.36949	66.0	0.2	-78.7	16.9	93.58194	0.986	-85.9	45.3	58.5	15.4	-13.6	196.31021	26-27
28	-1.859	-42.840	2009.78281	105.4	1.5	-84.1	25.7	92.25329	0.999	-82.2	44.7	58.9	14.3	-14.2	162.14580	27-28

JULY 31, 1964 13 HR 9 MIN 59 SEC 120 MS TAB NO 14 ATLAS PHOTO NO 14 POD SEQUENCE NO 34

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				949.680	1971.00443	-3.542	-35.279	3706.460	1.958	-74.393	116.968					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.068	-17.599	2149.43744	-9.5	7.0	-76.5	74.3	98.07720	0.900	-93.1	70.5	38.3	35.1	31.3	0.	0-1
2	-13.105	-29.729	2030.33609	-26.7	5.2	-79.0	63.3	96.49033	0.937	-90.2	58.9	47.6	20.4	9.5	359.91715	1-2
3	-6.936	-36.467	1977.41426	21.5	2.1	-80.4	75.6	92.92977	0.998	-85.5	51.5	53.2	6.7	-2.0	274.32553	2-3
4	-6.623	-30.245	1988.12779	-55.1	3.9	-81.6	52.0	94.04630	0.986	-85.1	57.6	47.8	11.0	9.6	187.36777	3-4
5	-6.290	-23.717	2039.27620	-73.0	5.5	-82.4	36.1	95.99094	0.936	-84.7	64.0	42.5	21.9	21.5	196.74615	4-5
6	-12.903	-22.865	2085.37335	-48.9	8.4	-81.2	48.6	98.63689	0.885	-90.2	65.5	42.2	28.2	21.9	201.89876	5-6
7	-20.277	-21.481	2185.70346	-34.8	12.6	-81.1	57.2	102.93217	0.791	-95.6	67.9	42.5	38.4	20.9	226.94203	6-7
8	-20.300	-28.976	2122.26746	-17.0	7.3	-77.4	70.1	100.39093	0.849	-95.2	61.0	47.9	32.4	7.5	212.90386	7-8
9	-20.499	-36.020	2108.35617	4.8	1.9	-73.5	85.0	99.23944	0.866	-94.8	54.7	53.3	30.9	-5.4	200.06321	8-9
10	-13.366	-36.244	2018.73158	7.9	1.9	-76.5	81.9	95.48605	0.953	-90.1	52.7	53.0	18.3	-2.6	216.14195	9-10
11	-6.936	-36.467	1977.41426	21.5	2.1	-80.4	75.6	92.92977	0.998	-85.5	51.5	53.2	6.7	-2.0	194.86568	10-11
12	-1.914	-42.740	1999.67940	105.3	1.4	-84.1	24.9	91.75082	0.998	-82.2	44.8	58.9	14.2	-14.1	242.92958	11-12
13	-1.617	-36.670	1973.80299	147.0	2.3	-84.3	65.3	90.35914	0.983	-81.6	50.8	53.7	4.5	-2.9	184.00310	12-13
14	-1.258	-30.572	1984.52991	-113.0	3.0	-84.3	36.1	92.70181	0.999	-80.8	56.9	48.4	9.8	8.4	184.95014	13-14
15	-0.821	-24.180	2034.57373	-100.6	3.5	-83.9	20.8	94.67241	0.952	-80.0	63.3	43.1	21.1	19.9	194.03955	14-15
16	-0.271	-17.122	2131.93445	-96.8	3.8	-83.1	13.1	97.81230	0.863	-79.0	70.3	38.0	33.4	32.1	214.41692	15-16
17	-5.921	-16.488	2139.31253	-78.9	7.0	-82.9	25.8	99.28155	0.847	-84.1	71.2	37.2	34.1	34.0	172.20345	16-17
18	-12.768	-15.182	2194.03070	-60.8	11.4	-83.4	37.6	102.32669	0.790	-90.2	72.9	36.8	39.1	35.2	211.03781	17-18
19	-20.492	-12.869	2313.44296	-47.3	17.8	-85.5	46.5	107.46377	0.684	-96.2	75.9	37.2	48.0	35.6	243.35395	18-19
20	-30.275	-8.167	2545.27069	-37.9	29.2	-91.8	53.5	116.73594	0.498	-102.2	81.2	38.2	61.3	37.2	322.95414	19-20
21	-29.274	-18.991	2368.57510	-26.5	20.2	-83.3	63.5	110.06655	0.636	-101.0	71.8	43.3	51.5	18.2	286.06248	20-21
22	-28.953	-27.746	2286.13528	-12.4	11.2	-77.5	74.8	106.66585	0.706	-99.3	57.7	53.8	44.8	-11.4	231.83956	21-22
23	-29.050	-35.780	2267.00925	3.5	1.8	-72.1	87.2	105.22694	0.726	-100.1	64.3	48.6	46.1	2.8	212.80494	22-23
24	-29.521	-43.803	2303.96387	18.8	-7.8	-66.3	10.1	105.43113	0.702	-98.6	51.6	59.0	47.4	-25.1	212.38950	23-24
25	-20.865	-43.046	2139.73102	25.3	-3.8	-68.8	10.7	99.30092	0.846	-94.4	48.6	58.5	34.1	-18.0	263.01935	24-25
26	-13.689	-42.736	2047.33687	38.0	-1.5	-73.1	12.3	95.49667	0.936	-90.1	46.6	58.4	23.1	-14.6	217.53214	25-26
27	-7.240	-42.664	2004.31976	65.8	0.2	-78.7	16.5	93.11787	0.986	-85.9	45.3	58.5	15.3	-13.6	195.35079	26-27
28	-1.914	-42.740	1999.67940	105.3	1.4	-84.1	24.9	91.75082	0.998	-82.2	44.8	58.9	14.2	-14.1	161.33932	27-28

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TAB NO 15 ATLAS PHOTO NO 15 POD SEQUENCE NO 36
 JULY 31, 1964 13 HR 10 MIN 4 SEC 240 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ			
				944.560		1961.34534	-3.561	-35.242	3696.801	1.960	-74.364	116.963			
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.059	-17.617	2139.06555	-9.6	7.0	-76.5	74.2	97.60798	0.900	-93.1	70.5	38.3	35.0	31.3	0-1
2	-13.103	-29.687	2020.63870	-26.8	5.2	-79.0	63.2	96.02947	0.937	-90.2	59.0	47.6	20.4	9.5	358.17379
3	-6.963	-36.393	1967.75581	21.0	2.1	-80.4	75.4	92.47744	0.998	-85.5	51.5	53.2	6.8	-2.0	273.03972
4	-6.652	-30.201	1978.56746	-55.1	3.9	-81.6	51.9	93.59403	0.986	-85.1	57.6	47.8	11.1	9.6	186.46748
5	-6.321	-23.703	2029.52731	-72.9	5.5	-82.4	36.2	95.53192	0.936	-84.7	64.0	42.5	21.9	21.5	195.81658
6	-12.902	-22.855	2075.47134	-48.9	8.4	-81.2	48.6	98.16853	0.885	-90.2	65.5	42.2	28.2	21.9	200.95090
7	-20.240	-21.480	2175.24362	-34.8	12.6	-81.1	57.2	102.43963	0.792	-95.6	67.9	42.5	38.3	20.9	225.82345
8	-20.263	-28.937	2112.06940	-17.1	7.3	-77.4	70.0	99.90849	0.849	-95.2	61.0	47.9	32.3	7.5	211.09433
9	-20.459	-35.946	2098.04572	4.7	1.9	-73.6	84.8	98.75401	0.866	-94.8	54.7	53.3	30.8	-5.3	199.10489
10	-13.362	-36.170	2008.92905	7.7	2.0	-76.5	81.7	95.02239	0.953	-90.1	52.8	53.1	18.3	-2.6	215.05774
11	-6.963	-36.393	1967.75581	21.0	2.1	-80.4	75.4	92.47744	0.998	-85.5	51.5	53.2	6.8	-2.0	193.92775
12	-1.966	-42.635	1989.53621	105.2	1.4	-84.0	24.0	91.24360	0.998	-82.2	44.9	58.9	14.1	-14.0	241.68420
13	-1.670	-36.596	1964.03542	147.2	2.3	-84.3	65.1	89.90202	0.983	-81.6	50.9	53.7	4.4	-2.9	183.04587
14	-1.313	-30.528	1974.85458	-112.6	3.0	-84.2	36.3	92.25121	0.999	-80.8	57.0	48.4	9.8	8.4	184.04927
15	-0.877	-24.166	2024.70493	-100.4	3.5	-83.9	21.0	94.21290	0.952	-80.0	63.3	43.1	21.1	19.9	193.10787
16	-0.331	-17.144	2121.50998	-96.7	3.8	-83.1	13.3	97.33360	0.864	-79.0	70.3	38.0	33.3	32.0	171.37413
17	-5.953	-16.510	2129.01144	-78.8	7.0	-82.9	25.9	98.80329	0.847	-84.1	71.2	37.2	34.1	33.9	210.33430
18	-12.768	-15.210	2183.51910	-60.8	11.4	-83.4	37.6	101.83647	0.791	-90.2	72.9	36.9	39.0	35.1	242.09422
19	-20.453	-12.914	2302.18643	-47.3	17.8	-89.5	46.6	106.94108	0.685	-96.2	75.9	37.2	47.9	35.5	320.68505
20	-30.174	-8.267	2531.96451	-37.9	29.0	-91.8	53.5	116.12600	0.500	-102.1	81.1	38.2	61.1	37.1	284.21540
21	-29.185	-19.011	2356.79056	-26.5	20.1	-83.3	63.4	109.51892	0.638	-101.0	71.8	43.3	51.4	18.2	230.67046
22	-28.866	-27.615	2274.80548	-12.4	11.1	-77.5	74.7	106.13705	0.707	-100.1	64.3	48.6	46.1	2.8	230.67046
23	-28.961	-15.702	2255.56711	3.4	1.9	-72.2	87.1	104.69554	0.727	-99.3	57.7	53.8	44.7	-11.2	211.75806
24	-29.424	-43.674	2291.87457	18.7	-7.7	-66.4	9.9	104.87767	0.704	-98.6	51.6	59.0	47.2	-25.0	211.21572
25	-20.821	-42.933	2128.93940	25.2	-3.7	-68.9	10.5	98.79995	0.847	-94.4	48.7	58.6	34.1	-17.9	261.38000
26	-13.683	-42.629	2037.12082	37.8	-1.5	-73.2	12.0	95.02015	0.936	-90.1	46.7	58.4	23.1	-14.5	216.39174
27	-7.266	-42.559	1994.27782	65.5	0.2	-78.7	16.0	92.65143	0.986	-85.9	45.5	58.5	15.3	-13.5	194.38210
28	-1.966	-42.635	1989.53621	105.2	1.4	-84.0	24.0	91.24360	0.998	-82.2	44.9	58.9	14.1	-14.0	160.52906

				TAB NO		16		ATLAS PHOTO NO		16		POD SEQUENCE NO		38					
JULY 31,1964 13 HR 10 MIN 9 SEC 359 M5																			
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LUN		R		V		PTH		AZ	
				939.440		1951.67883		-3.580		-35.204		3687.134		1.962		-74.335		116.958	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT				
1	-12.050	-17.635	2128.68430	-9.7	7.0	-76.6	74.1	97.13836	0.900	-93.1	70.5	38.3	35.0	31.3	0-1				
2	-13.101	-29.645	2010.93288	-26.9	5.2	-79.1	63.1	95.56821	0.937	-90.2	59.0	47.6	20.5	9.5	356.42660				
3	-6.990	-36.320	1958.09102	20.4	2.1	-80.4	75.2	92.02492	0.998	-85.5	51.6	53.2	6.8	-1.9	271.75288				
4	-6.681	-30.158	1968.99966	-55.0	3.9	-81.6	51.9	93.14139	0.986	-85.2	57.7	47.9	11.1	9.6	185.56659				
5	-6.351	-23.690	2019.77054	-72.8	5.5	-82.4	36.3	95.07253	0.936	-84.7	64.1	42.5	21.9	21.5	194.88626				
6	-12.901	-22.845	2065.56049	-48.9	8.4	-81.2	48.6	97.69975	0.885	-90.2	65.5	42.2	28.2	21.9	200.00218				
7	-20.203	-21.478	2164.77490	-34.9	12.5	-81.1	57.2	101.94667	0.792	-95.6	67.9	42.5	38.3	20.9	224.70408				
8	-20.225	-28.898	2101.86285	-17.1	7.3	-77.5	69.9	99.42564	0.849	-95.2	61.1	47.9	32.3	7.5	210.88386				
9	-20.419	-35.871	2087.72821	4.6	1.9	-73.6	84.7	98.26826	0.867	-94.7	54.8	53.3	30.8	-5.2	198.14592				
10	-13.358	-36.097	1999.11929	7.5	2.0	-76.5	81.5	94.55839	0.954	-90.1	52.9	53.1	18.3	-2.5	213.97301				
11	-6.990	-36.320	1958.09102	20.4	2.1	-80.4	75.2	92.02492	0.998	-85.5	51.6	53.2	6.8	-1.9	192.98919				
12	-2.019	-42.529	1979.39017	105.0	1.4	-84.0	23.1	90.73700	0.997	-82.2	45.0	58.9	14.0	-13.9	240.43904				
13	-1.724	-36.522	1954.26280	147.5	2.3	-84.2	64.9	89.44495	0.983	-81.6	51.0	53.7	4.3	-2.8	182.08880				
14	-1.367	-30.483	1965.17313	-112.2	3.0	-84.2	36.5	91.80047	0.999	-80.9	57.0	48.4	9.8	8.4	183.14799				
15	-0.934	-24.152	2014.82973	-100.2	3.5	-83.8	21.1	93.75311	0.952	-80.0	63.3	43.2	21.1	19.9	192.17558				
16	-0.391	-17.165	2111.08011	-96.6	3.9	-83.1	13.5	96.85466	0.864	-79.0	70.3	38.0	33.3	32.0	170.54432				
17	-5.985	-16.532	2118.70313	-78.8	7.0	-82.9	26.0	98.32470	0.847	-84.1	71.1	37.2	34.0	33.9	209.03427				
18	-12.768	-15.238	2172.99942	-60.7	11.4	-83.4	37.6	101.34586	0.791	-90.2	72.9	36.9	39.0	35.1	240.83457				
19	-20.414	-12.959	2290.92310	-47.3	17.7	-85.5	46.6	106.41808	0.686	-96.2	75.8	37.2	47.9	35.5	318.42783				
20	-30.074	-8.366	2518.66608	-37.9	28.9	-91.7	53.5	115.51641	0.502	-102.1	81.0	38.2	61.0	36.9	282.37690				
21	-29.097	-19.031	2345.00156	-26.6	20.0	-83.3	63.4	108.97108	0.639	-101.0	71.7	43.4	51.3	18.2	229.50135				
22	-28.779	-27.683	2263.47006	-12.5	11.1	-77.6	74.6	105.60799	0.708	-100.1	64.3	48.6	46.0	2.9	210.71085				
23	-28.872	-35.624	2244.12143	3.3	1.9	-72.3	87.0	104.16399	0.728	-99.3	57.8	53.9	44.6	-11.1	210.04386				
24	-29.327	-43.545	2279.78766	18.6	-7.6	-66.6	9.8	104.32432	0.705	-98.6	51.7	59.0	47.1	-24.8	259.74512				
25	-20.777	-42.820	2118.14365	25.1	-3.7	-69.0	10.3	98.29881	0.848	-94.4	48.7	58.6	34.0	-17.8	215.25130				
26	-13.676	-42.522	2026.89986	37.6	-1.4	-73.3	11.8	94.54341	0.937	-90.1	46.8	58.4	23.0	-14.4	193.41290				
27	-7.291	-42.454	1984.23152	65.3	0.2	-78.7	15.6	92.18480	0.987	-85.9	45.6	58.5	15.2	-13.4	159.71849				
28	-2.019	-42.529	1979.39017	105.0	1.4	-84.0	23.1	90.73700	0.997	-82.2	45.0	58.9	14.0	-13.9	27-28				

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JULY 31, 1964 13 HR 10 MIN 14 SEC 479 MS

TAB NO 17

ATLAS PHOTO NO 17

POD SEQUENCE NO 40

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										934.320	1942.00485	-3.599	-35.166	3677.460	1.963	-74.306	116.953
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-12.041	-17.653	2118.29355	-9.8	7.0	-76.6	74.0	96.66877	0.900	-93.1	70.5	38.4	35.0	31.2	0.	0-1	
2	-13.099	-29.600	2001.23306	-27.0	5.2	-79.1	63.0	95.10723	0.937	-90.2	59.0	47.6	20.5	9.6	354.60177	1-2	
3	-7.018	-36.244	1948.41776	19.8	2.1	-80.4	74.9	91.57191	0.998	-85.5	51.7	53.3	6.8	-1.8	270.46875	2-3	
4	-6.709	-30.111	1959.43637	-55.0	3.9	-81.6	51.9	92.68897	0.986	-85.2	57.7	47.9	11.2	9.7	184.66641	3-4	
5	-6.381	-23.674	2010.03412	-72.7	5.6	-82.4	36.3	94.61408	0.936	-84.7	64.1	42.5	21.9	21.5	193.96119	4-5	
6	-12.900	-22.833	2055.67297	-48.9	8.4	-81.2	48.6	97.23207	0.885	-90.2	65.5	42.2	28.2	21.9	199.05627	5-6	
7	-20.166	-21.473	2154.33707	-34.9	12.5	-81.1	57.1	101.45516	0.792	-95.6	67.9	42.5	38.3	20.9	223.59041	6-7	
8	-20.187	-28.856	2091.66623	-17.2	7.3	-77.5	69.8	98.94325	0.849	-95.2	61.1	47.9	32.3	7.6	209.88156	7-8	
9	-20.379	-35.794	2077.40463	4.5	1.9	-73.7	84.5	97.78219	0.867	-94.7	54.8	53.3	30.8	-5.1	197.18846	8-9	
10	-13.354	-36.021	1989.30157	7.3	2.0	-76.6	81.3	94.09400	0.954	-90.1	52.9	53.1	18.3	-2.4	212.88857	9-10	
11	-7.018	-36.244	1948.41776	19.8	2.1	-80.4	74.9	91.57191	0.998	-85.5	51.7	53.3	6.8	-1.8	192.04984	10-11	
12	-2.071	-42.421	1969.22398	104.9	1.4	-83.9	22.2	90.22855	0.997	-82.2	45.1	58.9	13.9	-13.8	239.19182	11-12	
13	-1.777	-36.445	1944.48187	147.8	2.3	-84.2	64.6	88.98749	0.983	-81.6	51.1	53.7	4.2	-2.7	181.12923	12-13	
14	-1.422	-30.436	1955.49611	-111.8	3.0	-84.2	36.6	91.35112	0.999	-80.9	57.1	48.4	9.8	8.5	182.24739	13-14	
15	-0.990	-24.136	2004.97449	-100.1	3.6	-83.8	21.3	93.29420	0.952	-80.0	63.3	43.2	21.1	20.0	191.24842	14-15	
16	-0.450	-17.184	2100.69250	-96.5	3.9	-83.0	13.7	96.37758	0.865	-79.0	70.3	38.0	33.2	32.0	211.18171	15-16	
17	-6.018	-16.551	2108.43802	-78.7	7.1	-82.9	26.1	97.84807	0.848	-84.1	71.1	37.2	34.0	33.9	169.71810	16-17	
18	-12.767	-15.263	2162.52896	-60.7	11.4	-83.4	37.7	100.85755	0.791	-90.2	72.9	36.9	39.0	35.0	208.03797	17-18	
19	-20.375	-13.001	2279.72498	-47.3	17.7	-85.5	46.6	105.89812	0.687	-96.2	75.8	37.2	47.8	35.4	239.58766	18-19	
20	-29.975	-8.458	2505.48700	-37.9	28.8	-91.6	53.4	114.91231	0.504	-102.1	81.0	38.2	60.9	36.8	316.21657	19-20	
21	-29.004	-19.047	2333.26401	-26.6	19.9	-83.3	63.3	108.42564	0.640	-101.0	71.7	43.4	51.3	18.2	280.58730	20-21	
22	-28.693	-27.648	2252.15512	-12.5	11.1	-74.5	74.5	105.07285	0.709	-100.1	64.3	48.6	45.8	2.9	228.34641	21-22	
23	-28.782	-35.543	2232.67557	3.2	2.0	-72.4	86.8	103.63236	0.729	-99.3	57.8	53.9	44.5	-11.0	209.66666	22-23	
24	-29.231	-43.413	2267.68390	18.5	-7.5	-66.7	9.6	103.77011	0.707	-98.6	51.7	59.0	47.0	-24.6	208.86947	23-24	
25	-20.733	-42.704	2107.32730	25.0	-3.6	-69.1	10.0	97.79667	0.849	-94.4	48.8	58.6	33.8	-17.5	258.11174	24-25	
26	-13.674	-42.413	2016.65790	37.4	-1.4	-73.3	11.5	96.06567	0.937	-90.1	47.0	58.4	23.0	-14.3	214.10949	25-26	
27	-7.317	-42.346	1974.16463	65.0	0.2	-78.7	15.1	91.71721	0.987	-85.9	45.7	58.6	15.1	-13.3	192.44162	26-27	
28	-2.071	-42.421	1969.22398	104.9	1.4	-83.9	22.2	90.22855	0.997	-82.2	45.1	58.9	13.9	-13.8	158.90641	27-28	

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TAB NO 18

ATLAS PHOTO NO 18

POD SEQUENCE NO 42

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										929.200	1932.32352	-3.618	-35.128	3667.779	1.965	-74.277	116.948
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-12.032	-17.671	2107.89349	-10.0	7.0	-76.7	73.8	96.20178	0.900	-93.1	70.5	38.4	34.9	31.2	0.	0-1	
2	-13.098	-29.539	1991.62000	-27.1	5.3	-79.1	62.9	94.65038	0.937	-90.2	59.1	47.6	20.5	9.6	352.29416	1-2	
3	-7.046	-36.153	1938.72607	18.9	2.1	-80.4	74.5	91.11696	0.998	-85.5	51.8	53.3	6.8	-1.8	269.21003	2-3	
4	-6.738	-30.049	1949.94466	-55.0	3.9	-81.6	51.8	92.23990	0.985	-85.2	57.8	47.9	11.2	9.8	183.77439	3-4	
5	-6.411	-23.641	2000.47392	-72.6	5.6	-82.4	36.3	94.16380	0.936	-84.7	64.1	42.5	22.0	21.5	193.07488	4-5	
6	-12.900	-22.802	2045.98686	-48.9	8.4	-81.2	48.5	96.77391	0.885	-90.2	65.6	42.2	28.3	22.0	198.13359	5-6	
7	-20.131	-21.448	2144.14948	-35.0	12.5	-81.2	57.1	100.97548	0.792	-95.6	67.9	42.5	38.3	20.9	222.51782	6-7	
8	-20.151	-28.795	2081.58258	-17.3	7.3	-77.5	69.7	98.46617	0.849	-95.2	61.1	47.9	32.3	7.6	208.93674	7-8	
9	-20.341	-35.699	2067.08209	4.3	2.0	-73.8	84.3	97.29605	0.868	-94.8	54.9	53.1	18.3	-2.3	196.24482	8-9	
10	-13.351	-35.929	1979.47371	7.0	2.0	-76.6	81.0	93.62913	0.954	-90.1	52.9	53.3	30.7	-5.0	211.80831	9-10	
11	-7.046	-36.153	1938.72607	18.9	2.1	-80.4	74.5	91.11696	0.998	-85.5	51.8	53.3	6.8	-1.8	191.11103	10-11	
12	-2.125	-42.298	1958.94460	104.8	1.4	-83.9	21.1	89.70485	0.996	-82.2	45.2	58.9	13.8	-13.7	237.92923	11-12	
13	-1.831	-36.354	1934.67615	148.4	2.3	-84.1	64.2	88.52727	0.983	-81.6	51.2	53.7	4.1	-2.6	180.15182	12-13	
14	-1.477	-30.374	1945.88249	-111.3	3.0	-84.1	36.7	90.91169	0.999	-80.9	57.1	48.4	9.9	8.6	181.35418	13-14	
15	-1.047	-24.103	1995.28456	-99.9	3.6	-83.8	21.5	92.84271	0.952	-80.0	63.4	43.2	21.1	20.0	190.35806	14-15	
16	-0.509	-17.184	2090.60901	-96.4	3.9	-83.0	13.8	95.91394	0.865	-79.0	70.3	38.0	33.2	32.0	210.19399	15-16	
17	-6.050	-16.551	2098.49316	-78.6	7.1	-82.9	26.2	97.38603	0.847	-84.1	71.1	37.2	34.0	33.9	168.91800	16-17	
18	-12.768	-15.267	2152.42319	-60.7	11.4	-83.4	37.7	100.38617	0.791	-90.2	72.9	36.9	39.0	35.0	207.08426	17-18	
19	-20.339	-13.017	2268.98825	-47.4	17.7	-85.5	46.5	105.39967	0.687	-96.2	75.8	37.2	47.8	35.4	238.42215	18-19	
20	-29.883	-8.516	2493.03699	-38.0	28.6	-91.5	53.4	114.34184	0.506	-102.1	80.9	38.2	60.8	36.7	314.23676	19-20	
21	-28.924	-19.038	2321.88602	-26.7	19.9	-83.3	63.2	107.89690	0.641	-101.0	71.7	43.4	51.2	18.2	279.06485	20-21	
22	-28.609	-27.592	2241.00632	-12.6	11.1	-77.7	74.4	104.55926	0.709	-100.1	64.3	48.6	45.8	3.0	227.28327	21-22	
23	-28.695	-35.443	2221.25119	3.1	2.1	-72.5	86.6	103.10135	0.731	-99.3	57.9	53.9	44.4	-10.9	208.64515	22-23	
24	-29.134	-43.261	2255.46170	18.4	-7.3	-66.8	9.4	103.20988	0.709	-98.6	51.8	59.0	46.9	-24.4	207.66862	23-24	
25	-20.690	-42.570	2096.40152	24.8	-3.5	-69.2	9.7	97.28923	0.850	-94.4	48.9	58.6	33.8	-17.5	256.46507	24-25	
26	-13.664	-42.286	2006.30925	37.2	-1.4	-73.4	11.1	93.58294	0.938	-90.1	47.1	58.4	22.9	-14.2	212.95730	25-26	
27	-7.344	-42.223	1963.98924	64.7	0.2	-78.7	14.5	91.24466	0.987	-85.9	45.9	58.5	15.0	-13.1	191.46080	26-27	
28	-2.125	-42.298	1958.94460	104.8	1.4	-83.9	21.1	89.70485	0.996	-82.2	45.2	58.9	13.8	-13.7	158.08581	27-28	

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 10 MIN 24 SEC 719 MS

TAB NO 19

ATLAS PHOTO NO 19

POD SEQUENCE NO 44

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				924.080		1922.63486		-3.638		-35.090		3658.090		1.967		-74.248		116.943	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-12.023	-17.689	2097.48425	-10.2	7.0	-76.7	73.6	95.73440	0.899	-93.1	70.4	38.4	34.9	31.2	0.	0	-1		
2	-13.096	-29.477	1981.99852	-27.3	5.3	-79.1	62.7	94.19312	0.936	-90.2	59.2	47.6	20.6	9.7	349.98827	1	-2		
3	-7.074	-36.062	1929.02974	18.1	2.1	-80.4	74.2	90.66205	0.998	-85.5	51.9	53.2	6.8	-1.7	267.95013	2	-3		
4	-6.768	-29.988	1940.44563	-55.0	3.9	-81.6	51.7	91.79047	0.985	-85.2	57.9	47.9	11.3	9.8	182.88195	3	-4		
5	-6.442	-23.609	1990.90433	-72.6	5.6	-82.3	36.4	93.71308	0.935	-84.7	64.1	42.5	22.0	21.6	192.18740	4	-5		
6	-12.900	-22.771	2036.29002	-49.0	8.4	-81.2	48.5	96.31523	0.884	-90.2	65.6	42.2	28.3	22.0	197.20971	5	-6		
7	-20.096	-21.423	2133.95038	-35.0	12.5	-81.2	57.0	100.49526	0.792	-95.7	67.9	42.5	38.3	20.9	221.44376	6	-7		
8	-20.115	-28.736	2071.49014	-17.5	7.3	-77.6	69.5	97.98867	0.849	-95.2	61.2	47.9	32.3	7.7	207.99034	7	-8		
9	-20.302	-35.604	2056.75421	4.1	2.0	-73.8	84.0	96.80966	0.888	-94.8	55.0	53.3	30.7	-4.9	195.30077	8	-9		
10	-13.348	-35.837	1969.64034	6.7	2.0	-76.7	80.7	93.16400	0.954	-90.1	53.1	53.1	18.3	-2.3	210.72766	9	-10		
11	-7.074	-36.062	1929.02974	18.1	2.1	-80.4	74.2	90.66205	0.998	-85.5	51.9	53.2	6.8	-1.7	190.17160	10	-11		
12	-2.179	-42.174	1948.66603	104.6	1.4	-83.8	20.0	89.18237	0.996	-82.2	45.4	58.9	13.7	-13.6	179.17553	11	-12		
13	-1.885	-36.262	1924.86726	149.1	2.3	-84.1	63.7	88.06735	0.982	-81.6	51.3	53.7	4.0	-2.5	179.17553	12	-13		
14	-1.532	-30.312	1936.26302	-110.8	3.0	-84.1	36.8	90.47211	0.999	-80.9	57.2	48.4	9.9	8.6	180.46070	13	-14		
15	-1.103	-24.070	1985.58679	-99.7	3.6	-83.7	21.6	92.39085	0.952	-80.0	63.4	43.2	21.2	20.0	189.46666	14	-15		
16	-0.567	-17.183	2080.51643	-96.3	4.0	-83.0	13.9	95.44988	0.865	-79.0	70.3	38.0	33.2	32.0	209.20500	15	-16		
17	-6.081	-16.550	2088.57177	-78.6	7.1	-82.9	26.3	96.92346	0.847	-84.1	71.1	37.2	34.0	33.9	168.11711	16	-17		
18	-12.769	-15.270	2142.30460	-60.7	11.4	-83.4	37.7	99.91419	0.791	-90.2	72.9	36.9	39.0	35.0	206.12925	17	-18		
19	-23.303	-13.033	2258.23798	-47.4	17.6	-85.5	46.5	104.90059	0.687	-96.2	75.7	37.2	47.7	35.4	237.25511	18	-19		
20	-29.791	-8.573	2480.57886	-38.0	28.5	-91.5	53.4	113.77099	0.507	-102.1	80.8	38.2	60.7	36.7	312.26086	19	-20		
21	-28.840	-19.029	2310.49829	-26.7	19.8	-83.3	63.2	107.36770	0.642	-101.0	71.7	43.4	51.1	18.3	277.54296	20	-21		
22	-28.525	-27.556	2229.85062	-12.7	11.1	-77.7	74.3	104.03836	0.710	-100.1	64.4	48.6	45.8	3.1	226.21845	21	-22		
23	-28.607	-35.342	2209.82498	3.0	2.1	-72.5	86.5	102.57025	0.732	-99.3	57.9	53.9	44.3	-10.7	207.62344	22	-23		
24	-29.038	-43.108	2243.24716	18.2	-7.2	-66.9	9.2	102.65002	0.710	-98.6	51.9	59.0	46.7	-24.2	206.47141	23	-24		
25	-20.647	-42.436	2085.47589	24.6	-3.5	-69.4	9.5	96.78179	0.850	-94.4	49.0	58.6	33.7	-17.4	254.82394	24	-25		
26	-13.659	-42.160	1995.95935	36.9	-1.3	-73.5	10.7	93.10015	0.938	-90.1	47.2	58.4	22.8	-14.1	211.80559	25	-26		
27	-7.371	-42.100	1953.81316	64.4	0.2	-78.7	13.9	90.77208	0.988	-85.9	46.0	58.5	14.9	-13.0	190.48001	26	-27		
28	-2.179	-42.174	1948.66603	104.6	1.4	-83.8	20.0	89.18237	0.996	-82.2	45.4	58.9	13.7	-13.6	157.26501	27	-28		

JULY 31, 1964 13 HR 10 MIN 29 SEC 839 MS

TAB NO 20

ATLAS PHOTO NO 20

POD SEQUENCE NO 46

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				918.960		1912.93851	-3.657	-35.052	3648.394	1.969	-74.218	116.938				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.014	-17.707	2087.06531	-10.3	7.0	-76.8	73.4	95.26657	0.899	-93.1	70.4	38.4	34.9	31.1	0.	0-1
2	-13.095	-29.417	1972.36589	-27.4	5.3	-79.1	62.6	93.73534	0.936	-90.2	59.2	47.6	20.6	9.8	347.69746	1-2
3	-7.102	-35.971	1919.32877	17.2	2.1	-80.4	73.8	90.20724	0.998	-85.5	52.0	53.2	6.8	-1.6	266.68843	2-3
4	-6.797	-29.926	1930.93669	-55.1	3.9	-81.5	51.6	91.34059	0.985	-85.2	57.9	47.9	11.4	9.9	181.98891	3-4
5	-6.472	-23.576	1981.31972	-72.5	5.6	-82.3	36.4	93.26165	0.935	-84.7	64.2	42.5	22.1	21.6	191.29753	4-5
6	-12.900	-22.741	2026.57642	-49.0	8.4	-81.2	48.4	95.85577	0.884	-90.2	65.6	42.2	28.3	22.0	196.28911	5-6
7	-20.061	-21.398	2123.73285	-35.1	12.5	-81.2	56.9	100.01416	0.792	-95.7	67.9	42.5	38.3	21.0	220.36764	6-7
8	-20.079	-28.676	2061.38583	-17.6	7.3	-77.6	69.4	97.51061	0.849	-95.2	61.2	47.9	32.3	7.8	207.04081	7-8
9	-20.263	-35.510	2046.42116	3.9	2.1	-73.9	83.8	96.32303	0.868	-94.8	55.1	53.3	30.6	-4.8	194.35588	8-9
10	-13.345	-35.745	1959.80145	6.4	2.1	-76.7	80.4	92.69861	0.954	-90.1	53.2	53.1	18.3	-2.2	209.64675	9-10
11	-7.102	-35.971	1919.32877	17.2	2.1	-80.4	73.8	90.20724	0.998	-85.5	52.0	53.2	6.8	-1.6	189.23164	10-11
12	-2.233	-42.051	1938.39091	104.5	1.4	-83.8	18.9	88.66152	0.995	-82.2	45.5	58.9	13.5	-13.4	235.40793	11-12
13	-1.939	-36.172	1915.05518	149.7	2.3	-84.0	63.3	87.60779	0.982	-81.6	51.4	53.7	3.9	-2.4	178.20074	12-13
14	-1.587	-30.251	1926.63512	-110.3	3.0	-84.0	36.8	90.03203	0.999	-80.9	57.3	48.4	9.9	8.7	179.56674	13-14
15	-1.160	-24.038	1975.87567	-99.5	3.6	-83.7	21.8	91.93839	0.951	-80.0	63.4	43.2	21.2	20.1	188.57317	14-15
16	-0.626	-17.184	2070.40479	-96.2	4.0	-83.0	14.1	94.98498	0.865	-79.0	70.3	38.0	33.2	32.0	208.12123	15-16
17	-6.113	-16.550	2078.56024	-78.5	7.1	-82.8	26.3	96.45995	0.847	-84.1	71.1	37.2	34.0	33.9	167.31485	16-17
18	-12.769	-15.275	2132.16269	-60.7	11.4	-83.4	37.7	99.44113	0.791	-90.2	72.9	36.9	39.0	35.0	205.17159	17-18
19	-20.267	-13.050	2247.46140	-47.4	17.6	-85.5	46.5	104.40029	0.688	-96.2	75.7	37.2	47.7	35.4	236.08460	18-19
20	-29.699	-8.632	2468.09399	-38.1	28.4	-91.4	53.3	113.19889	0.509	-102.1	80.8	38.2	60.6	36.6	276.01461	19-20
21	-28.756	-19.021	2299.09189	-26.8	19.8	-83.4	63.1	106.83763	0.642	-101.0	71.7	43.3	51.1	18.3	225.14962	20-21
22	-28.441	-27.481	2218.68442	-12.8	11.1	-77.8	74.1	103.51697	0.711	-100.1	64.4	48.6	45.7	3.2	207.62344	21-22
23	-28.519	-35.242	2198.39734	2.8	2.2	-72.6	86.3	102.03911	0.733	-99.3	58.0	53.9	44.2	-10.6	206.60093	22-23
24	-28.941	-42.957	2231.04465	18.1	-7.0	-67.1	8.9	102.09072	0.712	-98.6	52.0	59.0	46.6	-24.0	203.27857	23-24
25	-20.603	-42.302	2074.55377	24.4	-3.4	-69.5	9.2	96.27453	0.851	-94.4	49.1	58.6	33.6	-17.2	253.18917	24-25
26	-13.653	-42.034	1985.61104	36.6	-1.3	-73.5	10.3	92.61744	0.939	-90.1	47.3	58.4	22.7	-13.9	210.65509	25-26
27	-7.397	-41.977	1943.63896	64.0	0.2	-78.7	13.2	90.29958	0.988	-85.9	46.1	58.5	14.8	-12.9	189.49916	26-27
28	-2.233	-42.051	1938.39091	104.5	1.4	-83.8	18.9	88.66152	0.995	-82.2	45.5	58.9	13.5	-13.4	156.44463	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 10 MIN 34 SEC 959 MS

TAB NO 21

ATLAS PHOTO NO 21

POD SEQUENCE NO 48

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LUN	R	V	PTH	AZ		
				913.840				1903.23456	-3.677	-35.013	3638.690	1.971	-74.189	116.933		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.005	-17.725	2076.63678	-10.5	7.0	-76.8	73.2	94.79812	0.899	-93.1	70.4	38.4	34.8	31.1	0.	0-1
2	-13.094	-29.358	1962.71535	-27.6	5.3	-79.2	62.4	93.27670	0.936	-90.2	59.3	47.6	20.6	9.8	345.46225	1-2
3	-7.129	-35.882	1909.62453	16.4	2.2	-80.4	73.4	89.75269	0.998	-85.5	52.1	53.2	6.8	-1.5	265.42277	2-3
4	-6.826	-29.867	1921.41150	-55.1	4.0	-81.5	51.5	90.88993	0.985	-85.2	58.0	47.9	11.4	9.9	181.09445	3-4
5	-6.503	-23.546	1971.70486	-72.4	5.6	-82.3	36.4	92.80882	0.935	-84.7	64.2	42.5	22.1	21.7	190.40207	4-5
6	-12.900	-22.713	2016.82970	-49.0	8.4	-81.3	48.4	95.39474	0.884	-90.2	65.7	42.2	28.3	22.1	195.35483	5-6
7	-20.025	-21.376	2113.41784	-35.1	12.5	-81.2	56.8	99.53129	0.793	-95.7	68.0	42.5	38.2	21.0	219.28648	6-7
8	-20.062	-28.619	2051.26190	-17.7	7.4	-77.7	69.3	97.03163	0.850	-95.2	61.3	47.9	32.3	7.9	206.08350	7-8
9	-20.224	-35.418	2036.08475	3.8	2.1	-74.0	83.6	95.83626	0.869	-94.8	55.1	53.3	30.6	-4.7	193.40914	8-9
10	-13.342	-35.655	1949.95862	6.1	2.1	-76.7	80.2	92.23302	0.954	-90.1	53.3	53.1	18.3	-2.1	208.56594	9-10
11	-7.129	-35.882	1909.62453	16.4	2.2	-80.4	73.4	89.75269	0.998	-85.5	52.1	53.2	6.8	-1.5	188.29108	10-11
12	-2.287	-41.930	1928.12807	104.4	1.4	-83.7	17.9	88.14353	0.994	-82.2	45.6	58.9	13.4	-13.3	234.15085	11-12
13	-1.993	-36.082	1905.24118	150.4	2.3	-84.0	63.0	87.14875	0.982	-81.6	51.4	53.7	3.8	-2.3	177.22895	12-13
14	-1.642	-30.191	1916.99251	-109.9	3.0	-84.0	36.9	89.59053	0.999	-80.9	57.3	48.4	10.0	8.8	178.67147	13-14
15	-1.216	-24.008	1966.13622	-99.3	3.7	-83.7	21.9	91.48464	0.951	-80.0	63.5	43.1	21.2	20.1	187.67431	14-15
16	-0.685	-17.186	2060.24771	-96.1	4.0	-82.9	14.2	94.51805	0.865	-79.0	70.3	38.0	33.2	32.0	207.20851	15-16
17	-6.145	-16.553	2068.53516	-78.4	7.1	-82.8	26.5	95.99423	0.847	-84.1	71.1	37.2	34.0	33.9	166.50874	16-17
18	-12.770	-15.282	2121.96747	-60.7	11.4	-83.4	37.7	98.96558	0.791	-90.2	72.8	36.9	39.0	35.0	204.20806	17-18
19	-20.230	-13.070	2236.62238	-47.4	17.6	-85.5	46.5	103.89707	0.688	-96.2	75.7	37.2	47.7	35.4	234.90504	18-19
20	-29.606	-8.694	2455.52924	-38.1	28.3	-91.4	53.3	112.62310	0.510	-102.2	80.7	38.2	60.5	36.5	308.28994	19-20
21	-28.671	-19.016	2287.64139	-26.9	19.7	-83.4	63.0	106.30551	0.643	-101.0	71.7	43.3	51.0	18.3	274.46002	20-21
22	-28.357	-27.429	2207.49714	-12.9	11.1	-77.0	77.0	102.99644	0.712	-100.1	64.4	48.6	45.7	3.3	224.06962	21-22
23	-28.431	-35.145	2186.97061	2.7	2.3	-72.7	86.1	101.50805	0.734	-99.3	58.0	53.9	44.2	-10.4	205.37607	22-23
24	-28.845	-42.809	2218.86899	18.0	-6.9	-67.2	8.7	101.53273	0.714	-98.6	52.0	59.0	46.5	-23.8	204.09279	23-24
25	-20.560	-42.171	2063.64667	24.2	-3.3	-69.6	8.9	95.76799	0.852	-94.4	49.2	58.6	33.5	-17.1	251.56373	24-25
26	-13.648	-41.911	1975.27423	36.4	-1.3	-73.6	9.9	92.13526	0.934	-90.1	47.4	58.4	22.7	-13.8	209.50726	25-26
27	-7.424	-41.856	1933.47583	63.7	0.2	-78.7	12.7	89.82758	0.989	-85.9	46.2	58.5	14.7	-12.8	188.51961	26-27
28	-2.287	-41.930	1928.12807	104.4	1.4	-83.7	17.9	88.14353	0.994	-82.2	45.6	58.9	13.4	-13.3	155.62518	27-28

JULY 31, 1964 13 HR 10 MIN 40 SEC 79 MS

TAB NO 22

ATLAS PHOTO NO 22

POD SEQUENCE NO 50

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				908.721		1893.52341	-3.696	-34.975	3628.979	1.972	-74.159	116.928				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.996	-17.744	2066.19910	-10.7	7.0	-76.9	73.0	94.32930	0.899	-93.2	70.4	38.4	34.8	31.1	0.	0-1
2	-13.092	-29.299	1953.05630	-27.7	5.3	-79.2	62.3	92.81767	0.936	-90.2	59.3	47.6	20.7	9.9	343.22800	1-2
3	-7.157	-35.794	1899.91530	15.6	2.2	-80.4	73.1	89.29815	0.998	-85.5	52.2	53.2	6.8	-1.4	264.15602	2-3
4	-6.855	-29.807	1911.87892	-55.1	4.0	-81.5	51.4	90.43894	0.984	-85.2	58.0	47.9	11.5	10.0	180.19957	3-4
5	-6.533	-23.516	1962.08076	-72.4	5.6	-82.3	36.4	92.35555	0.935	-84.7	64.2	42.5	22.1	21.7	189.50548	4-5
6	-12.900	-22.685	2007.07243	-49.1	8.4	-81.3	48.4	94.93321	0.884	-90.2	65.7	42.2	28.4	22.1	194.42446	5-6
7	-19.990	-21.354	2103.21164	-35.2	12.5	-77.7	69.1	96.04790	0.793	-95.7	68.0	42.5	38.2	21.0	218.20426	6-7
8	-20.006	-28.562	2041.12912	-17.8	7.4	-77.7	69.1	96.55223	0.850	-95.2	61.3	47.9	32.3	7.9	205.12471	7-8
9	-20.185	-35.325	2025.74257	3.6	2.1	-74.1	83.4	95.34922	0.869	-94.8	55.2	53.3	30.6	-4.6	192.46191	8-9
10	-13.339	-35.566	1940.10989	5.8	2.1	-76.8	79.9	91.76717	0.954	-90.2	53.4	53.1	18.3	-2.0	207.44852	9-10
11	-7.157	-35.794	1899.91530	15.6	2.2	-80.4	73.1	89.29815	0.998	-85.5	52.2	53.2	6.8	-1.4	187.35000	10-11
12	-2.340	-41.809	1917.86551	104.2	1.4	-83.7	16.8	87.62666	0.994	-82.2	45.8	58.9	13.3	-13.2	232.89485	11-12
13	-2.048	-35.993	1895.42368	151.1	2.3	-84.0	62.6	86.68997	0.982	-81.6	51.5	53.7	3.7	-2.2	176.25810	12-13
14	-1.697	-30.131	1907.34398	-109.4	3.1	-83.9	37.0	89.14887	0.999	-80.9	57.4	48.4	10.0	8.8	177.77593	13-14
15	-1.273	-23.977	1956.38911	-99.1	3.7	-83.6	22.1	91.03054	0.951	-80.0	63.5	43.1	21.2	20.2	186.77449	14-15
16	-0.743	-17.189	2050.08191	-95.9	4.1	-82.9	14.4	94.05074	0.865	-79.0	70.3	38.0	33.2	32.0	206.20382	15-16
17	-6.177	-16.556	2058.49939	-78.4	7.2	-82.8	26.5	95.52802	0.847	-84.1	71.1	37.2	34.0	33.9	165.70201	16-17
18	-12.770	-15.289	2111.76001	-60.7	11.4	-83.4	37.7	98.48948	0.791	-90.2	72.8	36.9	39.0	35.0	203.24302	17-18
19	-20.194	-13.090	2225.77063	-47.5	17.5	-85.5	46.4	103.39325	0.689	-96.2	75.7	37.2	47.7	35.4	233.72429	18-19
20	-29.513	-8.755	2442.95804	-38.1	28.2	-91.4	53.2	112.04700	0.512	-102.2	80.7	38.2	60.4	36.5	306.30091	19-20
21	-28.586	-19.011	2276.18182	-26.9	19.7	-83.4	62.9	105.77297	0.644	-101.0	71.7	43.3	51.0	18.3	272.90673	20-21
22	-28.273	-27.376	2196.30432	-13.0	11.1	-77.9	73.9	102.47202	0.713	-100.1	64.4	48.6	45.6	3.4	222.98822	21-22
23	-28.343	-35.048	2175.54163	2.6	2.3	-72.8	85.9	100.97690	0.735	-99.3	58.1	53.9	44.1	-10.3	204.55091	22-23
24	-28.749	-42.661	2206.69968	17.8	-6.8	-67.4	8.5	100.97503	0.715	-98.6	52.1	59.0	46.3	-23.6	202.91016	23-24
25	-20.517	-42.040	2052.73892	24.1	-3.3	-69.7	8.6	95.26143	0.853	-94.4	49.3	58.6	33.5	-16.9	249.94329	24-25
26	-13.642	-41.787	1964.93552	36.1	-1.2	-73.7	9.5	91.65300	0.940	-90.1	47.5	58.4	22.6	-13.7	208.35989	25-26
27	-7.451	-41.735	1923.31139	63.3	0.2	-78.7	12.1	89.35552	0.989	-85.9	46.4	58.5	14.7	-12.6	187.53979	26-27
28	-2.340	-41.809	1917.86551	104.2	1.4	-83.7	16.8	87.62666	0.994	-82.2	45.8	58.9	13.3	-13.2	154.80582	27-28

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TAB NO 23										ATLAS PHOTO NO 23										POD SEQUENCE NO 52									
JULY 31, 1964 13 HR 10 MIN 45 SEC 199 MS																													
TRAJECTORY DATA										SEC TO IMPACT										ALT									
										903.601										1883.80429									
PHOTO DATA										LAT										-3.716									
										LUN										-34.936									
										R										3619.260									
										V										1.974									
										PTH										-74.129									
										AZ										116.923									
PT	LAT	LUN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-11.987	-17.762	2055.75146	-10.8	7.0	-76.9	72.8	93.86035	0.899	-93.2	70.4	38.4	34.8	31.1	0.	0-1													
2	-13.091	-29.240	1943.39423	-27.8	5.4	-79.2	62.2	92.35848	0.936	-90.2	59.4	47.6	20.7	10.0	340.97593	1-2													
3	-7.185	-35.704	1890.20102	14.8	2.2	-80.4	72.8	88.84364	0.998	-85.5	52.3	53.2	6.8	-1.3	262.88942	2-3													
4	-6.884	-29.747	1902.34215	-55.1	4.0	-81.5	51.3	89.98774	0.984	-85.2	58.1	47.9	11.6	10.1	179.30462	3-4													
5	-6.564	-23.485	1952.45447	-72.3	5.7	-82.3	36.5	91.90218	0.934	-84.7	64.3	42.5	22.2	21.7	188.60926	4-5													
6	-12.900	-22.657	1997.31447	-49.1	8.4	-81.3	48.3	94.47164	0.884	-90.2	65.7	42.2	28.4	22.1	193.49442	5-6													
7	-19.955	-21.332	2092.94833	-35.3	12.5	-81.3	56.7	98.56464	0.793	-95.7	68.0	42.5	38.2	21.1	217.12361	6-7													
8	-19.970	-28.504	2030.99606	-17.9	7.4	-77.8	69.0	96.07282	0.850	-95.2	61.4	47.9	32.2	8.0	204.16717	7-8													
9	-20.146	-35.233	2015.39917	3.4	2.4	-74.1	81.2	94.86212	0.867	-94.8	55.3	53.3	30.5	-4.5	191.51509	8-9													
10	-13.336	-35.476	1930.25716	5.5	2.1	-76.8	79.6	91.30112	0.954	-90.2	53.5	53.1	18.3	-1.9	206.40421	9-10													
11	-7.185	-35.704	1890.20102	14.8	2.2	-80.4	72.8	88.84364	0.998	-85.5	52.3	53.2	6.8	-1.3	188.60926	10-11													
12	-2.394	-41.688	1907.59824	104.1	1.4	-83.6	15.7	87.11023	0.993	-82.2	45.9	58.9	13.1	-13.0	231.63921	11-12													
13	-2.102	-35.903	1885.60106	151.9	2.3	-83.9	62.2	86.23128	0.982	-81.6	51.6	53.7	3.6	-2.1	175.28748	12-13													
14	-1.752	-30.071	1897.69106	-109.0	3.1	-83.9	37.1	89.07732	1.000	-80.9	57.4	48.4	10.0	8.4	176.88027	13-14													
15	-1.374	-23.947	1946.69954	-98.9	3.7	-83.6	22.2	90.57632	0.951	-80.0	63.5	43.1	21.2	20.2	185.87503	14-15													
16	-0.802	-17.191	2039.91734	-95.8	4.1	-82.9	14.6	95.58366	0.865	-79.0	70.3	38.0	33.2	32.0	205.20071	15-16													
17	-6.210	-16.558	2048.46524	-78.3	7.2	-82.8	26.6	95.06187	0.847	-84.1	71.1	37.2	34.0	33.9	164.89566	16-17													
18	-12.711	-15.295	2101.55652	-60.7	11.4	-83.4	37.7	98.01355	0.791	-90.2	72.8	36.9	39.0	35.0	202.27898	17-18													
19	-20.157	-13.110	2214.92880	-47.5	17.5	-85.5	46.4	102.88989	0.689	-96.2	75.7	37.2	47.6	35.3	232.54692	18-19													
20	-29.421	-8.816	2430.41855	-38.2	28.1	-91.3	53.2	111.47235	0.513	-102.2	80.6	38.2	60.3	36.4	304.32947	19-20													
21	-28.562	-19.005	2264.73532	-27.0	19.6	-83.4	62.8	105.24103	0.645	-101.0	71.6	43.3	50.9	18.4	271.36660	20-21													
22	-28.189	-27.323	2185.11813	-13.1	11.1	-77.9	73.8	101.94973	0.713	-100.1	64.5	48.6	45.5	3.5	221.90988	21-22													
23	-28.256	-34.950	2164.11884	2.5	2.4	-72.9	85.7	100.44602	0.736	-99.3	58.1	53.8	44.0	-10.1	203.52705	22-23													
24	-28.654	-42.513	2194.54031	17.7	-6.6	-67.5	8.3	100.41778	0.717	-98.6	52.2	59.0	46.2	-23.4	201.73042	23-24													
25	-20.474	-41.904	2041.83105	23.9	-3.2	-69.8	8.3	94.75485	0.854	-94.4	49.4	58.6	33.4	-16.8	248.33000	24-25													
26	-13.637	-41.663	1954.59328	35.4	-1.2	-73.8	9.1	91.17056	0.940	-90.1	47.7	58.4	22.5	-13.5	207.21390	25-26													
27	-7.478	-41.614	1913.14221	63.0	0.3	-78.7	11.5	88.88323	0.990	-85.9	46.5	58.5	14.6	-12.5	186.55978	26-27													
28	-2.394	-41.688	1907.59824	104.1	1.4	-83.6	15.7	87.11023	0.993	-82.2	45.9	58.9	13.1	-13.0	153.98618	27-28													

TAB NO 24										ATLAS PHOTO NO 24										POD SEQUENCE NO 54																			
JULY 31, 1964 13 HR 10 MIN 50 SEC 319 MS																																							
TRAJECTORY DATA										SEC TO IMPACT										ALT																			
										898.481										1874.07779																			
PHOTO DATA										LAT										LUN																			
										-3.736										-34.896																			
										3609.533										1.976																			
										-74.099										116.918																			
PT LAT LON RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA										V PTH AZ										SCALE										PT-PT									
1 -11.978 -17.780 2045.29445 -11.0 7.0 -77.0 72.7										93.39178 0.899 -93.2 70.3 38.4 34.7 31.0										0										0 -1									
2 -13.090 -29.178 1933.73970 -28.0 5.4 -79.2 67.0										91.89966 0.935 -90.2 59.4 47.6 20.7 10.0										338.67589										1 -2									
3 -7.214 -35.613 1880.48328 13.9 2.2 -80.4 72.4										88.38935 0.998 -85.5 52.4 53.2 6.8 -1.2										261.62571										2 -3									
4 -6.914 -29.668 1892.80804 -55.2 4.0 -81.5 51.2										89.53666 0.984 -85.2 58.2 47.8 11.7 10.1										178.41038										3 -4									
5 -6.595 -23.453 1842.83913 -72.2 5.7 -82.3 36.5										91.44931 0.934 -84.7 64.3 62.5 22.2 21.8										187.71597										4 -5									
6 -12.900 -22.626 1987.57347 -49.1 8.5 -81.3 48.3										94.01807 0.863 -90.2 65.7 62.2 28.4 22.2										192.56698										5 -6									
7 -19.920 -21.307 2082.71262 -35.3 12.5 -81.3 56.6										98.08267 0.793 -95.7 68.0 62.5 38.2 21.1										216.04066										6 -7									
8 -14.934 -28.444 -20.02.87871 -18.1 7.4 -77.8 68.8										95.59414 0.850 -95.2 61.4 47.9 32.2 8.1										203.21528										7 -8									
9 -20.108 -35.138 2005.06351 3.2 2.2 -74.2 82.9										94.37536 0.869 -94.8 55.4 53.3 30.5 -4.4										190.57050										8 -9									
10 -13.333 -35.384 1920.40521 5.2 2.2 -76.9 79.3										90.83510 0.954 -90.2 53.5 53.1 18.3 -1.8										205.32701										9 -10									
11 -7.214 -35.613 1880.48328 13.9 2.2 -80.4 72.4										88.38935 0.998 -85.5 52.4 53.2 6.8 -1.2										185.46811										10 -11									
12 -2.444 -41.565 1897.32011 104.0 1.4 -83.6 14.7										86.59331 0.993 -82.2 46.0 58.9 13.0 -12.9										230.38311										11 -12									
13 -2.157 -35.812 1875.7231 152.7 2.3 -83.9 61.9										85.77248 0.982 -81.6 51.7 53.7 3.5 -2.0										174.31607										12 -13									
14 -1.808 -30.009 1888.03793 -108.5 3.1 -83.9 37.2										88.26642 1.000 -80.9 57.5 48.4 10.1 9.0										175.98506										13 -14									
15 -1.386 -23.914 1936.89757 -98.8 3.7 -83.6 22.4										80.12242 0.951 -80.0 63.6 43.1 21.3 20.2										186.97805										14 -15									
16 -0.862 -17.152 2099.77211 -95.7 4.1 -82.8 14.7										93.10170 0.865 -79.0 70.3 38.0 33.2 3.2										164.09130										15 -16									
17 -6.242 -16.598 2038.45462 -78.2 7.2 -82.8 26.6										94.59678 0.887 -84.1 71.1 37.2 34.1 33.9										201.31967										16 -17									
18 -12.772 -15.599 2091.38501 -60.7 11.5 -83.4 37.8										97.53008 0.791 -90.2 70.8 36.9 30.0 35.0										201.31967										17 -18									
19 -20.122 -13.126 2204.13571 44.5 17.5 -85.5 4.4										102.38878 0.988 -96.2 75.6 37.2 47.6 35.3										231.38125										18 -19									
20 -28.330 -8.811 2411.97482 -33.2 28.0 -91.3 53.2										110.92029 0.515 -102.2 80.5 38.2 60.2 36.3										302.39681										19 -20									
21 -28.419 -18.994 2253.34012 -27.1 19.6 -88.4 62.8										104.71191 0.646 -101.0 71.6 43.3 50.8 18.4										269.85424										20 -21									
22 -28.107 -27.268 2173.96426 -13.2 11.2 -78.3 73.6										101.42892 0.714 -100.1 64.5 48.6 45.5 3.6										202.84209										21 -22									
23 -28.170 -34.850 -25.52.71829 2.3 2.5 -73.0 85.6										99.91614 0.737 -99.3 58.2 53.8 43.9 -10.0										202.50740										22 -23									
24 -28.560 -42.363 2182.39905 17.6 -6.5 -67.6 8.1										98.06126 0.719 -98.6 52.3 59.0 46.1 -23.2										202.55349										23 -24									
25 -20.432 -41.776 2030.92580 23.7 -3.1 -69.9 8.0										94.24836 0.855 -94.4 49.5 58.6 33.3 -16.6										246.72746										24 -25									
26 -13.632 -41.537 1944.24673 35.6 -1.2 -73.8 8.7										90.68791 0.941 -90.1 47.8 58.4 22.5 -13.4										206.07786										25 -26									
27 -7.505 -41.491 1892.96465 62.6 0.3 -78.7 10.9										88.61055 0.990 -85.9 46.6 58.5 14.5 -12.4										185.58019										26 -27									
28 -2.444 -41.565 1897.32011 104.0 1.4 -83.6 14.7										86.59331 0.993 -82.2 46.0 58.9 13.0 -12.9										153.16605										27 -28									

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JULY 31, 1964 13 HR 10 MIN 55 SEC 439 MS

TAB NO 25

ATLAS PHOTO NO 25

POD SEQUENCE NO 56

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				893.361		1864.34351	-3.756	-34.857	3599.799	1.978	-74.069	116.913				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.969	-17.798	2034.82758	-11.2	7.0	-77.0	72.5	92.92280	0.899	-93.2	70.3	38.5	34.7	31.0	0.	0-1
2	-13.090	-29.117	1924.07603	-28.1	5.4	-79.2	61.9	91.44040	0.935	-90.2	59.5	47.6	20.8	10.1	336.37729	1-2
3	-7.243	-35.522	1870.76013	13.1	2.2	-80.4	72.1	87.93505	0.998	-85.5	52.4	53.2	6.8	-1.1	260.36079	2-3
4	-6.944	-29.624	1883.26605	-55.2	4.0	-81.5	51.1	89.08521	0.984	-85.2	58.2	47.8	11.7	10.2	177.51571	3-4
5	-6.626	-23.421	1933.21388	-72.2	5.7	-82.3	36.5	90.99598	0.934	-84.7	64.3	42.5	22.3	21.8	186.82157	4-5
6	-12.901	-22.596	1977.82115	-49.1	8.5	-81.3	48.2	93.54957	0.883	-90.2	65.8	42.2	28.5	22.2	191.63833	5-6
7	-19.889	-21.283	2072.46469	-35.4	12.5	-81.3	56.5	97.60014	0.793	-95.7	68.0	42.5	38.2	21.1	214.97428	6-7
8	-19.899	-28.384	2010.75162	-18.2	7.4	-77.9	68.7	95.11500	0.850	-95.2	61.5	47.9	32.2	8.1	202.26189	7-8
9	-20.070	-35.044	1994.72154	3.0	2.3	-74.3	82.7	93.88832	0.870	-94.8	55.4	53.3	30.5	-4.3	189.62535	8-9
10	-13.331	-35.292	1910.54691	5.0	2.2	-76.9	79.0	90.36879	0.954	-90.2	53.6	53.0	18.3	-1.7	204.24940	9-10
11	-7.243	-35.522	1870.76013	13.1	2.2	-80.4	72.1	87.93505	0.998	-85.5	52.4	53.2	6.8	-1.1	184.52683	10-11
12	-2.504	-41.442	1887.04205	103.8	1.4	-83.5	13.6	86.07752	0.992	-82.2	46.1	58.9	12.8	-12.8	229.12807	11-12
13	-2.212	-35.721	1865.93974	153.5	2.3	-83.8	61.5	85.31394	0.982	-81.6	51.8	53.7	3.4	-1.9	173.34566	12-13
14	-1.864	-29.948	1878.37845	-108.0	3.1	-83.8	37.2	87.82534	1.000	-80.9	57.6	48.4	10.1	9.0	175.08954	13-14
15	-1.444	-23.882	1927.14732	-98.6	3.7	-83.5	22.5	89.66815	0.951	-80.0	63.6	43.1	21.3	20.3	184.08005	14-15
16	-0.921	-17.192	2019.61729	-95.6	4.2	-82.8	14.9	92.65014	0.865	-79.0	70.3	38.0	33.2	32.1	203.20619	15-16
17	-6.275	-16.558	2028.43240	-78.2	7.2	-82.8	26.7	94.13116	0.847	-84.2	71.1	37.2	34.1	33.9	163.28624	16-17
18	-12.773	-15.304	2081.20026	-60.6	11.5	-83.4	37.8	97.06400	0.791	-90.2	72.8	36.9	39.0	35.0	200.35895	17-18
19	-20.086	-13.143	2193.32849	-47.5	17.5	-85.5	46.4	101.88702	0.690	-96.3	75.6	37.2	47.6	35.3	230.21398	18-19
20	-23.239	-8.927	2405.52191	-38.2	27.9	-91.2	53.1	110.33140	0.516	-102.2	80.5	38.2	60.1	36.3	304.46758	19-20
21	-28.356	-18.787	2221.71477	-27.1	19.5	-83.4	62.7	104.18141	0.647	-101.0	71.6	43.3	50.8	18.4	268.35220	20-21
22	-28.024	-27.212	2162.80246	-13.3	11.2	-78.0	73.5	100.90774	0.715	-100.1	64.5	48.6	45.4	3.7	179.77264	21-22
23	-28.083	-34.751	2141.31451	2.2	2.6	-73.1	85.4	99.38610	0.738	-99.3	58.2	53.8	43.8	-9.8	201.48140	22-23
24	-28.466	-42.214	2170.26328	17.4	-6.4	-67.8	7.8	93.30501	0.720	-98.6	52.3	59.0	46.0	-23.0	199.37960	23-24
25	-20.389	-41.643	2020.61941	23.5	-3.1	-70.1	7.8	93.74181	0.855	-94.4	49.6	58.6	33.2	-16.5	245.12961	24-25
26	-13.627	-41.611	1933.89790	35.3	-1.1	-73.9	8.3	90.20515	0.941	-90.1	47.9	58.4	22.4	-13.3	204.92807	25-26
27	-7.533	-41.368	1892.78551	62.3	0.3	-78.7	10.2	87.93780	0.990	-85.9	46.7	58.5	14.4	-12.3	184.60033	26-27
28	-2.504	-41.442	1887.04205	103.8	1.4	-83.5	13.6	86.07752	0.992	-82.2	46.1	58.9	12.8	-12.8	152.34573	27-28

JULY 31, 1964 13 HR 11 MIN 0 SEC 559 MS

TAB NO 26

ATLAS PHOTO NO 26

POD SEQUENCE NO 58

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				888.240		1854.59976	-3.776	-34.817	3590.055	1.980	-74.039	116.908				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.960	-17.816	2024.34914	-11.4	7.0	-77.0	72.3	92.45263	0.899	-93.2	70.3	38.5	34.7	31.0	0.	0-
2	-13.088	-29.058	1914.38814	-28.3	5.4	-79.3	61.7	90.97999	0.935	-90.2	59.6	47.6	20.8	10.1	334.11457	1-2
3	-7.271	-35.433	1861.02806	12.3	2.2	-80.4	71.7	87.48037	0.998	-85.5	52.5	53.2	6.9	-1.0	259.09102	2-3
4	-6.973	-29.564	1873.70653	-55.2	4.0	-81.5	51.0	88.63293	0.983	-85.2	58.3	47.8	11.8	10.3	176.61950	3-4
5	-6.657	-23.390	1923.56198	-72.1	5.7	-82.2	36.6	90.54140	0.934	-84.7	64.4	42.5	22.3	21.8	185.92278	4-5
6	-12.900	-22.567	1968.03415	-49.2	8.5	-81.3	48.2	93.08664	0.883	-90.2	65.8	42.2	28.5	22.2	190.70510	5-6
7	-19.850	-21.260	2062.17133	-35.5	12.5	-81.4	56.5	97.11547	0.793	-95.7	68.0	42.5	38.2	21.2	213.89083	6-7
8	-19.862	-28.326	2000.59209	-18.3	7.5	-77.9	68.5	94.63436	0.850	-95.2	61.5	47.9	32.2	8.2	201.30117	7-8
9	-20.031	-34.951	1984.35818	2.9	2.3	-74.3	82.5	93.40028	0.870	-94.8	55.5	53.3	30.4	-4.2	188.67718	8-9
10	-13.328	-35.201	1900.67372	4.7	2.2	-76.9	78.8	89.90177	0.954	-90.2	53.7	53.0	18.3	-1.6	203.16750	9-10
11	-7.271	-35.433	1861.02806	12.3	2.2	-80.4	71.7	87.48037	0.998	-85.5	52.5	53.2	6.9	-1.0	183.58335	10-11
12	-2.558	-41.320	1876.77008	103.7	1.4	-83.5	12.6	85.56384	0.992	-82.2	46.3	58.9	12.7	-12.6	227.87485	11-12
13	-2.266	-35.631	1856.10361	154.4	2.3	-83.8	61.2	84.85584	0.982	-81.6	51.9	53.7	3.3	-1.8	172.37714	12-13
14	-1.919	-29.887	1868.70703	-107.6	3.1	-83.8	37.3	87.38343	1.000	-80.9	57.6	48.4	10.1	9.1	174.19300	13-14
15	-1.500	-23.851	1917.37663	-98.4	3.8	-83.5	22.7	89.21295	0.951	-80.0	63.6	43.1	21.3	20.3	183.17850	14-15
16	-0.980	-17.194	2009.43173	-95.5	4.2	-82.8	15.0	92.18191	0.865	-79.0	70.3	38.0	33.2	32.1	202.20153	15-16
17	-6.307	-16.560	2018.37204	-78.1	7.3	-82.8	26.8	93.66380	0.847	-84.2	71.1	37.2	34.1	33.9	162.47819	16-17
18	-12.773	-15.310	2070.96686	-60.6	11.5	-83.4	37.8	96.58668	0.791	-90.2	72.8	36.9	39.0	35.0	199.39157	17-18
19	-20.049	-13.162	2182.45706	-47.5	17.4	-85.5	46.4	101.38228	0.690	-96.3	75.6	37.2	47.5	35.3	229.03451	18-19
20	-29.147	-8.986	2392.97607	-38.3	27.8	-91.2	53.1	109.75644	0.518	-102.2	80.4	38.2	60.0	36.2	298.51347	19-20
21	-28.251	-18.980	2230.46573	-27.2	19.5	-83.5	62.6	103.64844	0.648	-101.0	71.6	43.3	50.7	18.5	266.82119	20-21
22	-27.940	-27.159	2151.59662	-13.4	11.2	-78.1	73.4	100.38453	0.715	-100.1	64.5	48.6	45.4	3.8	218.69197	21-22
23	-27.996	-34.653	2129.88177	2.1	2.6	-73.2	85.2	98.85478	0.739	-99.3	58.3	53.8	43.7	-9.7	200.46295	22-23
24	-28.371	-42.066	2158.11557	17.3	-6.2	-67.9	7.6	98.74830	0.722	-98.6	52.4	59.0	45.8	-22.8	198.20792	23-24
25	-20.346	-41.511	2009.10370	23.3	-3.0	-70.2	7.5	93.23448	0.856	-94.4	49.7	58.6	33.1	-16.3	243.52986	24-25
26	-13.622	-41.287	1923.54443	35.0	-1.1	-74.0	7.9	89.72219	0.942	-90.1	48.0	58.4	22.3	-13.1	203.78291	25-26
27	-7.560	-41.246	1882.60701	61.9	0.3	-78.8	9.7	87.46508	0.991	-85.9	46.9	58.5	14.3	-12.1	183.61898	26-27
28	-2.558	-41.320	1876.77008	103.7	1.4	-83.5	12.6	85.56384	0.992	-82.2	46.3	58.9	12.7	-12.6	151.52980	27-28

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JULY 31, 1964 13 HR 11 MIN 5 SEC 678 MS

TAB NO 27 ATLAS PHOTO NO 27 POD SEQUENCE NO 60

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				873.121		1844.85172	-3.796	-34.777	3580.307	1.982	-74.008	116.902				
PT	LAT	LON	RANGE	AZS/C	A/N	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.951	-17.835	2013.86464	-11.5	7.0	-77.1	72.1	91.98090	0.899	-93.2	70.3	38.5	34.6	30.9	0.	0-1
2	-13.085	-29.000	1904.66908	-28.4	5.4	-79.3	61.6	90.51810	0.935	-90.2	59.6	47.6	20.8	10.2	331.91944	1-2
3	-7.277	-35.345	1851.29025	11.5	2.2	-80.4	71.4	87.02527	0.998	-85.5	52.6	53.2	6.9	-0.9	257.81387	2-3
4	-7.001	-29.506	1864.12738	-55.2	4.1	-61.5	56.9	88.17973	0.983	-85.2	58.4	47.8	11.9	10.3	175.72143	3-4
5	-6.686	-23.362	1913.87518	-72.0	5.7	-82.2	36.6	90.08521	0.933	-84.7	64.4	42.5	22.3	21.9	189.01759	4-5
6	-12.899	-22.541	1958.19850	-49.2	8.5	-81.3	48.1	92.62141	0.883	-90.2	65.8	42.2	28.5	22.3	189.76481	5-6
7	-19.812	-21.240	2051.81006	-35.5	12.5	-81.4	56.4	96.62758	0.793	-95.7	68.1	42.5	38.2	21.2	212.79381	6-7
8	-17.824	-28.271	1990.38655	-18.4	7.5	-77.9	68.4	94.15150	0.850	-95.2	61.6	47.9	32.2	8.3	200.32874	7-8
9	-19.990	-35.661	1973.98939	2.7	2.4	-74.4	82.3	92.91096	0.870	-94.8	55.6	53.3	30.4	-4.1	187.72441	8-9
10	-13.323	-35.113	1890.78456	4.4	2.2	-77.0	78.5	89.43401	0.954	-90.2	53.8	53.0	18.3	-1.5	202.07889	9-10
11	-7.297	-35.345	1851.29025	11.5	2.2	-80.4	71.4	87.02527	0.998	-85.5	52.6	53.2	6.9	-0.9	182.63655	10-11
12	-2.610	-41.200	1866.51614	103.5	1.4	-83.4	11.6	85.05344	0.991	-82.2	46.4	58.9	12.6	-12.5	226.62492	11-12
13	-2.319	-35.543	1846.27052	155.4	2.3	-83.7	60.8	84.39863	0.982	-81.6	52.0	53.7	3.2	-1.7	171.41199	12-13
14	-1.972	-29.828	1859.02521	-107.1	3.1	-83.7	35.6	86.93775	1.000	-80.9	57.7	48.4	10.2	9.2	173.29547	13-14
15	-1.595	-23.622	1907.58128	-98.2	3.8	-83.5	22.8	88.75665	0.951	-80.0	63.7	43.1	21.3	20.4	182.27167	14-15
16	-1.038	-17.199	1999.20375	-95.4	4.2	-82.8	15.2	91.71185	0.866	-79.0	70.3	38.0	33.1	32.1	201.18605	15-16
17	-6.338	-16.565	2008.25682	-78.1	7.3	-82.7	26.9	93.19398	0.847	-84.2	71.1	37.2	34.1	33.9	161.66570	16-17
18	-12.772	-15.320	2060.66058	-60.6	11.5	-83.4	37.8	96.10600	0.791	-90.2	72.8	36.9	39.0	35.0	198.41363	17-18
19	-20.011	-13.186	2171.48483	-47.6	17.4	-85.5	46.3	100.87287	0.691	-96.3	75.6	37.2	47.5	35.3	227.83443	18-19
20	-29.052	-9.052	2380.21295	-38.3	27.7	-91.1	53.0	109.17425	0.519	-102.2	80.3	38.2	59.9	36.1	296.51170	19-20
21	-28.164	-18.978	2218.89691	-27.3	19.4	-83.5	62.5	103.11081	0.648	-101.0	71.6	43.3	50.6	18.5	265.24524	20-21
22	-27.854	-27.109	2140.32233	-13.5	11.2	-78.1	73.2	99.85815	0.716	-100.1	64.6	48.6	45.2	4.0	199.43125	21-22
23	-27.906	-34.559	2118.45000	2.0	2.7	-73.3	85.0	98.32148	0.740	-99.3	58.3	53.8	43.7	-9.6	197.03836	22-23
24	-28.273	-41.922	2145.94839	17.2	-6.1	-68.0	7.4	98.19083	0.724	-98.6	52.5	59.0	45.7	-22.6	197.03836	23-24
25	-23.301	-41.182	1998.17681	23.1	-2.9	-70.3	7.2	92.72756	0.857	-94.4	49.8	58.5	33.0	-16.2	241.92352	24-25
26	-13.615	-41.165	1913.15089	34.8	-1.1	-74.0	7.6	89.23926	0.942	-90.1	48.1	58.4	22.2	-13.0	202.63321	25-26
27	-7.505	-41.126	1812.43773	61.6	0.3	-78.8	9.1	86.39279	0.991	-85.9	47.0	58.5	14.2	-12.0	182.63624	26-27
28	-2.610	-41.200	1866.51614	103.5	1.4	-83.4	11.6	85.05344	0.991	-82.2	46.4	58.9	12.6	-12.5	150.70656	27-28

JULY 31, 1964 13 HR 11 MIN 10 SEC 798 MS

TAB NO 28 ATLAS PHOTO NO 28 POD SEQUENCE NO 62

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				878.001	1835.09427	-3.817	-34.737	3570.550	1.984	-73.978	116.897					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.942	-17.853	2003.36853	-11.7	7.0	-77.1	71.9	91.50868	0.899	-93.2	70.3	38.5	34.6	30.9	0.	0-1
2	-13.082	-28.943	1894.93929	-28.6	5.4	-79.3	61.4	90.05569	0.934	-90.2	59.7	47.6	20.9	10.3	329.72458	1-2
3	-7.324	-35.257	1841.54514	10.7	2.2	-80.4	71.1	86.57002	0.998	-85.5	52.7	53.2	6.9	-0.8	256.53527	2-3
4	-7.029	-29.447	1854.53857	-55.2	4.1	-61.5	50.8	87.72607	0.983	-85.2	58.4	47.8	11.9	10.4	174.82267	3-4
5	-6.715	-23.333	1904.17690	-72.0	5.8	-82.2	36.6	89.62869	0.933	-84.7	64.4	42.5	22.4	21.9	184.11109	4-5
6	-12.897	-22.516	1948.35011	-49.2	8.5	-81.3	48.1	92.15558	0.882	-90.2	65.9	42.2	28.5	22.3	188.82311	5-6
7	-19.775	-21.221	2041.43559	-35.6	12.4	-81.4	56.3	96.13908	0.793	-95.7	68.1	42.5	38.2	21.2	211.69566	6-7
8	-19.785	-28.216	1980.17003	-18.5	7.5	-78.0	68.3	93.66814	0.850	-95.2	61.6	47.9	32.2	8.3	199.35472	7-8
9	-19.949	-34.770	1963.56767	2.5	2.4	-74.5	82.1	92.42126	0.871	-94.8	55.7	53.3	30.3	-4.0	186.77090	8-9
10	-13.318	-35.024	1880.88727	4.1	2.3	-77.0	78.2	88.96586	0.954	-90.2	53.9	53.0	18.3	-1.4	200.98976	9-10
11	-7.324	-35.257	1841.54514	10.7	2.2	-80.4	71.1	86.57002	0.998	-85.5	52.7	53.2	6.9	-0.8	181.68892	10-11
12	-2.662	-41.080	1856.25972	103.4	1.4	-83.4	10.6	84.54392	0.991	-82.2	46.5	58.9	12.5	-12.4	225.37552	11-12
13	-2.372	-35.455	1836.43150	156.3	2.3	-83.7	60.5	83.94151	0.981	-81.6	52.1	53.7	3.1	-1.6	170.44739	12-13
14	-2.026	-29.770	1849.33505	-106.7	3.1	-83.7	35.7	86.48434	1.000	-80.9	57.8	48.4	10.2	9.2	172.39738	13-14
15	-1.611	-23.793	1897.77589	-98.0	3.8	-83.4	23.0	88.29990	0.950	-80.0	63.7	43.1	21.3	20.4	181.36365	14-15
16	-1.096	-17.203	1988.96465	-95.3	4.3	-82.7	15.3	91.24129	0.866	-79.0	70.3	38.0	33.1	32.1	200.16928	15-16
17	-6.369	-16.569	1998.12874	-78.0	7.3	-82.7	26.9	92.72357	0.847	-84.2	71.1	37.2	34.1	33.9	160.85242	16-17
18	-12.771	-15.329	2050.34006	-60.6	11.5	-83.4	37.8	95.62465	0.791	-90.2	72.8	36.9	39.0	35.0	197.43412	17-18
19	-19.972	-13.209	2160.49783	-47.6	17.4	-85.4	46.3	100.36277	0.691	-96.3	75.6	37.2	47.5	35.3	226.63291	18-19
20	-28.956	-9.117	2367.56216	-38.4	27.6	-91.1	53.0	108.59171	0.521	-102.2	80.3	38.2	59.8	36.1	294.51498	19-20
21	-28.077	-18.976	2207.31708	-27.3	19.3	-83.5	62.4	102.57267	0.649	-101.0	71.6	43.3	50.6	18.5	263.67289	20-21
22	-27.768	-27.059	2129.03925	-13.6	11.2	-78.2	73.1	97.33136	0.717	-100.1	64.6	48.6	45.2	4.0	186.49157	21-22
23	-27.817	-34.464	2106.92365	1.8	2.7	-73.4	84.8	97.78797	0.741	-99.3	58.4	53.8	43.6	-9.4	198.39895	22-23
24	-28.176	-41.778	2133.78467	17.0	-6.0	-68.2	7.2	97.63353	0.725	-98.6	52.6	59.0	45.6	-22.4	195.87134	23-24
25	-20.256	-41.254	1987.25000	23.0	-2.9	-70.4	6.9	92.22011	0.858	-94.4	49.9	58.5	33.0	-16.0	240.32161	24-25
26	-13.607	-41.043	1902.83293	34.5	-1.0	-74.1	7.2	88.75612	0.943	-90.1	48.2	58.4	22.2	-12.9	201.48401	25-26
27	-7.610	-41.007	1862.26459	61.2	0.3	-78.8	8.5	86.52032	0.992	-85.9	47.1	58.5	14.1	-11.9	181.65290	26-27
28	-2.662	-41.080	1856.25972	103.4	1.4	-83.4	10.6	84.54392	0.991	-82.2	46.5	58.9	12.5	-12.4	149.88712	27-28

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JULY 31, 1964 13 HR 11 MIN 15 SEC 918 MS TAB NO 29 ATLAS PHOTO NO 29 POD SEQUENCE NO 64

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				872.881	1825.32901	-3.837	-34.697	3560.784	1.986	-73.947	116.892					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.933	-17.871	1992.86267	-11.9	7.0	-77.2	71.7	91.03605	0.899	-93.2	70.3	38.5	34.6	30.9	0.	0-1
2	-13.079	-28.486	1895.20248	-28.7	5.4	-79.4	61.3	89.59296	0.934	-90.2	59.7	47.6	20.9	10.3	327.51645	1-2
3	-7.350	-35.169	1831.79359	10.0	2.3	-80.4	70.8	86.11461	0.998	-85.5	52.8	53.2	6.9	-0.7	255.25596	2-3
4	-7.057	-29.389	1844.94414	-55.3	4.1	-81.4	50.7	87.27215	0.983	-85.2	58.5	47.8	12.0	10.5	173.92372	3-4
5	-6.744	-23.304	1894.47484	-71.9	5.8	-82.2	36.6	89.17158	0.933	-84.7	64.5	42.5	22.4	21.9	183.20472	4-5
6	-12.895	-22.489	1938.49667	-49.3	8.5	-81.3	48.0	91.68951	0.882	-90.2	65.9	42.2	28.6	22.3	187.88079	5-6
7	-19.737	-21.201	2031.05580	-35.6	12.4	-81.4	56.2	95.65033	0.793	-95.7	68.1	42.5	38.2	21.2	210.59679	6-7
8	-19.747	-28.160	1969.94591	-18.7	7.5	-78.0	68.1	93.18443	0.850	-95.2	61.6	47.9	32.2	8.4	198.38094	7-8
9	-19.908	-34.680	1953.16005	2.4	2.4	-74.6	81.9	91.93117	0.871	-94.8	55.7	53.3	30.3	-3.9	185.81707	8-9
10	-13.313	-34.936	1870.98207	3.8	2.3	-77.1	78.0	88.49734	0.954	-90.2	54.0	53.0	18.3	-1.3	199.89958	9-10
11	-7.350	-35.169	1831.79359	10.0	2.3	-80.4	70.8	86.11461	0.998	-85.5	52.8	53.2	6.9	-0.7	180.74031	10-11
12	-2.714	-40.960	1845.99918	103.2	1.3	-83.3	9.6	84.03486	0.990	-82.2	46.6	58.9	12.3	-12.3	224.12650	11-12
13	-2.424	-35.366	1826.58789	157.4	2.3	-83.6	60.2	83.48454	0.981	-81.6	52.2	53.7	3.0	-1.5	169.48303	12-13
14	-2.080	-29.710	1839.64108	-106.3	3.1	-83.7	35.8	86.03075	1.000	-80.9	57.8	48.4	10.3	9.3	171.49920	13-14
15	-1.666	-23.764	1887.96864	-97.8	3.8	-83.4	23.1	87.84305	0.950	-80.0	63.7	43.1	21.4	20.4	180.45607	14-15
16	-1.154	-17.207	1978.72746	-95.2	4.3	-82.7	15.5	90.77081	0.866	-79.0	70.3	38.0	33.1	32.1	199.15418	15-16
17	-6.400	-16.574	1988.00050	-77.9	7.3	-82.7	27.0	92.25314	0.847	-84.2	71.1	37.2	34.1	33.9	160.03922	16-17
18	-12.770	-15.339	2040.01836	-60.6	11.5	-83.4	37.8	95.14325	0.792	-90.2	72.8	36.8	39.0	35.0	196.45431	17-18
19	-19.934	-13.232	2149.51105	-47.6	17.3	-85.4	46.3	99.85268	0.692	-96.3	75.5	37.2	47.4	35.2	225.43211	18-19
20	-28.861	-9.181	2354.86322	-38.4	27.4	-91.0	53.0	108.00970	0.522	-102.2	80.1	38.2	59.7	36.0	292.52767	19-20
21	-27.900	-18.973	2195.73563	-27.4	19.3	-83.5	62.4	102.03444	0.650	-101.0	71.6	43.3	50.5	18.6	262.10832	20-21
22	-27.681	-27.009	2117.75055	-15.7	11.4	-75.2	73.0	98.80431	0.718	-100.1	64.6	48.6	45.2	4.1	215.39177	21-22
23	-27.727	-34.370	2095.43616	1.7	2.8	-73.4	84.7	97.25418	0.742	-99.3	58.4	53.8	13.5	-0.3	197.36672	22-23
24	-28.078	-41.634	2121.61777	16.9	-5.8	-68.3	6.9	97.07608	0.727	-98.6	52.6	59.0	45.4	-22.2	194.70569	23-24
25	-20.211	-41.124	1976.31412	22.8	-2.8	-70.5	6.6	91.71231	0.859	-94.4	50.0	58.5	32.9	-15.9	238.72327	24-25
26	-13.600	-40.920	1892.46753	34.2	-1.0	-74.2	6.8	88.27264	0.943	-90.1	48.3	58.4	22.1	-12.8	200.33429	25-26
27	-7.635	-40.887	1852.08534	60.9	0.3	-78.8	7.9	86.04757	0.992	-85.9	47.2	58.5	14.0	-11.8	180.66858	26-27
28	-2.714	-40.960	1845.99918	103.2	1.3	-83.3	9.6	84.03486	0.990	-82.2	46.6	58.9	12.3	-12.3	149.06736	27-28

JULY 31, 1964 13 HR 11 MIN 21 SEC 38 MS TAB NO 30 ATLAS PHOTO NO 30 POD SEQUENCE NO 66

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				867.761	1815.55585	-3.857	-34.656	3551.011	1.987	-73.916	116.887					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.974	-17.890	1982.34676	-12.0	6.9	-77.2	71.6	90.56303	0.899	-93.2	70.2	38.5	34.5	30.8	0.	0-1
2	-13.075	-28.827	1875.45927	-28.8	5.5	-79.4	61.2	89.12992	0.934	-90.2	59.8	47.6	20.9	10.4	325.29005	1-2
3	-7.376	-35.080	1822.03532	9.2	2.3	-80.4	70.4	85.65899	0.998	-85.6	52.9	53.2	6.9	-0.6	253.97623	2-3
4	-7.084	-29.329	1835.34486	-55.3	4.1	-81.4	50.6	86.81800	0.982	-85.2	58.5	47.8	12.1	10.5	173.02470	3-4
5	-6.773	-23.274	1884.77107	-71.8	5.8	-82.2	36.7	88.71459	0.933	-84.7	64.5	42.5	22.5	22.0	182.29906	4-5
6	-12.893	-22.462	1928.64011	-49.3	8.5	-81.3	48.0	91.22330	0.882	-90.2	65.9	42.2	28.6	22.3	186.93788	5-6
7	-19.700	-21.181	2020.67268	-35.7	12.4	-81.4	56.2	95.16142	0.793	-95.7	68.1	42.5	38.2	21.3	209.49773	6-7
8	-19.708	-28.104	1959.71461	-18.8	7.5	-78.1	68.0	92.70038	0.850	-95.2	61.7	47.9	32.2	8.5	197.40798	7-8
9	-19.867	-34.589	1942.74312	2.2	2.5	-74.6	81.6	91.44064	0.871	-94.8	55.8	53.3	30.3	-3.7	184.86310	8-9
10	-13.308	-34.846	1861.06851	3.5	2.3	-77.1	77.7	88.02843	0.954	-90.2	54.1	53.0	18.3	-1.2	198.80830	9-10
11	-7.376	-35.080	1822.03532	9.2	2.3	-80.4	70.4	85.65899	0.998	-85.6	52.9	53.2	6.9	-0.6	179.79072	10-11
12	-2.766	-40.839	1835.73332	103.1	1.3	-83.3	8.6	83.52614	0.990	-82.2	46.8	58.9	12.2	-12.1	222.87775	11-12
13	-2.477	-35.277	1816.73956	158.5	2.3	-83.6	59.9	83.02768	0.981	-81.6	52.3	53.7	3.0	-1.4	168.51872	12-13
14	-2.134	-29.650	1829.94424	-105.9	3.2	-83.6	35.8	85.57702	1.000	-80.9	57.9	48.4	10.3	9.4	170.60115	13-14
15	-1.722	-23.734	1878.16164	-97.7	3.9	-83.4	23.2	87.38620	0.950	-80.0	63.8	43.1	21.4	20.5	179.54927	14-15
16	-1.212	-17.210	1968.49608	-95.0	4.3	-82.7	15.6	90.30058	0.866	-79.0	70.3	38.0	33.1	32.1	198.14193	15-16
17	-6.431	-16.577	1977.87589	-77.9	7.3	-82.7	27.1	91.78288	0.847	-84.2	71.1	37.2	34.1	33.9	159.22625	16-17
18	-12.769	-15.347	2029.69925	-60.6	11.5	-83.4	37.8	94.66198	0.792	-90.2	72.8	36.8	39.0	35.0	195.47464	17-18
19	-19.895	-13.255	2138.52856	-47.6	17.3	-85.4	46.3	99.34280	0.692	-96.3	75.5	37.2	47.4	35.2	224.23251	18-19
20	-28.767	-9.244	2342.18161	-38.4	27.3	-91.0	52.9	107.42849	0.524	-102.2	80.1	38.2	59.6	35.9	290.55098	19-20
21	-27.903	-18.970	2184.15669	-27.5	19.2	-83.5	62.3	101.49624	0.651	-101.1	71.6	43.3	50.4	18.6	260.55483	20-21
22	-27.595	-26.958	2106.45642	-13.8	11.2	-78.3	72.8	98.27700	0.719	-100.1	64.6	48.6	45.1	4.1	214.29404	21-22
23	-27.637	-34.275	2083.94104	1.6	2.9	-73.5	84.5	96.72003	0.743	-99.3	58.5	53.8	13.4	-9.1	195.33463	22-23
24	-27.981	-41.489	2109.44449	16.8	-5.7	-68.4	6.7	96.51832	0.729	-98.6	52.7	59.0	45.3	-22.0	193.54107	23-24
25	-20.165	-40.995	1965.36850	22.6	-2.7	-70.6	6.3	91.20405	0.860	-94.4	50.1	58.5	32.8	-15.7	237.12522	24-25
26	-13.542	-40.797	1882.09291	34.0	-1.0	-74.2	6.4	87.78872	0.944	-90.2	48.5	58.4	22.0	-12.6	199.18336	25-26
27	-7.660	-40.766	1841.89859	60.5	0.3	-78.8	7.4	85.57448	0.992	-85.9	47.4	58.5	13.9	-11.6	179.68324	26-27
28	-2.766	-40.839	1835.73332	103.1	1.3	-83.3	8.6	83.52614	0.990	-82.2	46.8	58.9	12.2	-12.1	148.24716	27-28

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JULY 31, 1964 13 HR 11 MIN 26 SEC 158 MS

TAB NO 31

ATLAS PHOTO NO 31

POD SEQUENCE NO 68

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				862.641		1805.77472	-3.878	-34.616	3541.230	1.989	-73.885	116.881				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.914	-17.908	1971.82089	-12.2	6.9	-77.3	71.4	90.08958	0.899	-93.2	70.2	38.5	34.5	30.8	0.	0-1
2	-13.072	-28.769	1865.70677	-29.0	5.5	-79.4	61.0	88.66644	0.934	-90.2	59.8	47.6	20.9	10.5	323.06458	1-2
3	-7.402	-34.991	1812.27124	8.4	2.3	-80.4	70.1	85.20329	0.998	-85.6	53.0	53.2	6.9	-0.5	252.69515	2-3
4	-7.112	-29.270	1825.73734	-55.3	4.1	-81.4	50.5	86.36345	0.982	-85.2	58.6	47.8	12.1	10.6	172.12507	3-4
5	-6.803	-23.245	1875.05716	-71.8	5.8	-82.2	36.7	88.25713	0.932	-84.7	64.5	42.4	22.5	22.0	181.39217	4-5
6	-12.891	-22.435	1918.77217	-49.3	8.5	-81.3	67.9	90.75654	0.882	-90.2	65.9	42.2	28.6	22.4	185.99368	5-6
7	-19.662	-21.161	2010.27780	-35.8	12.4	-81.5	56.1	94.67196	0.794	-95.7	68.1	42.5	38.1	21.3	208.39754	6-7
8	-19.669	-28.048	1949.47382	-18.9	7.5	-78.1	67.8	92.21587	0.850	-95.2	61.7	47.9	32.2	8.5	196.43351	7-8
9	-19.825	-34.498	1932.31995	2.0	2.5	-74.7	81.4	90.94982	0.872	-94.6	55.9	53.3	30.2	-3.6	183.90849	8-9
10	-13.302	-34.757	1851.14830	3.2	2.3	-77.1	77.4	87.59520	0.954	-90.2	54.1	53.0	18.3	-1.1	197.71679	9-10
11	-7.402	-34.991	1812.27124	8.4	2.3	-80.4	70.1	85.20329	0.998	-85.6	53.0	53.2	6.9	-0.5	178.84039	10-11
12	-2.817	-40.718	1825.46667	102.9	1.3	-83.2	7.6	83.01835	0.989	-82.2	46.9	58.9	12.1	-12.0	221.62971	11-12
13	-2.529	-35.188	1806.88681	159.7	2.3	-83.6	59.6	82.57099	0.981	-81.6	52.4	53.7	2.9	-1.3	167.55515	12-13
14	-2.167	-29.590	1820.24052	-105.5	3.2	-83.6	35.9	85.12297	0.999	-80.9	57.9	48.4	10.3	9.4	169.70267	13-14
15	-1.777	-23.703	1868.36604	-97.5	3.9	-83.3	23.4	86.92896	0.950	-80.0	63.8	43.1	21.4	20.5	178.64141	14-15
16	-1.270	-17.213	1958.25490	-94.9	4.4	-82.7	15.7	89.82992	0.866	-79.0	70.3	38.0	33.1	32.1	197.12844	15-16
17	-6.461	-16.581	1967.73967	-77.8	7.3	-82.7	27.1	91.31209	0.847	-84.2	71.1	37.2	34.1	33.9	158.41268	16-17
18	-12.768	-15.356	2019.36719	-60.6	11.5	-83.4	37.8	98.18009	0.792	-90.2	72.8	36.8	39.0	35.0	194.49348	17-18
19	-19.856	-13.277	2127.53278	-47.7	17.3	-85.4	46.2	98.83229	0.693	-96.3	75.5	37.2	47.4	35.2	223.03172	18-19
20	-28.672	-9.307	2329.49359	-38.5	27.2	-90.9	52.9	106.84698	0.526	-102.2	80.1	38.2	59.5	35.8	288.57925	19-20
21	-27.816	-18.967	2172.56442	-27.5	19.2	-83.5	62.2	100.95760	0.652	-101.1	71.5	43.3	50.4	18.6	259.00285	20-21
22	-27.508	-26.908	2095.15524	-13.9	11.1	-78.4	72.7	97.74936	0.720	-100.1	64.6	48.6	45.0	4.2	213.19479	21-22
23	-27.566	-34.180	2072.46318	1.5	2.9	-73.6	84.3	96.18575	0.744	-99.3	58.5	53.8	43.3	-9.0	195.30215	22-23
24	-27.883	-41.345	2097.27667	16.6	-5.6	-68.6	6.5	95.96082	0.730	-98.6	52.8	59.0	45.2	-21.8	192.37906	23-24
25	-20.119	-40.865	1954.42155	22.4	-2.7	-70.7	6.0	90.69574	0.860	-94.4	50.2	58.5	32.7	-15.6	235.53284	24-25
26	-13.584	-40.674	1871.71559	33.7	-0.9	-74.3	6.0	87.30468	0.944	-90.2	48.6	58.4	22.0	-12.5	198.03311	25-26
27	-7.684	-40.645	1831.70963	60.1	0.3	-78.8	6.8	85.10127	0.993	-85.9	47.5	58.5	13.8	-11.5	178.69753	26-27
28	-2.817	-40.718	1825.46667	102.9	1.3	-83.2	7.6	83.01835	0.989	-82.2	46.9	58.9	12.1	-12.0	147.42677	27-28

JULY 31, 1964 13 HR 11 MIN 31 SEC 278 MS

TAB NO 32

ATLAS PHOTO NO 32

POD SEQUENCE NO 70

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				857.522		1795.98587	-3.899	-34.575	3531.441	1.991	-73.854	116.876				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.905	-17.926	1961.28523	-12.4	6.9	-77.3	71.2	89.61572	0.899	-93.2	70.2	38.5	34.5	30.8	0.	0-1
2	-13.068	-28.711	1855.94516	-29.1	5.5	-79.4	60.9	88.20252	0.934	-90.2	59.9	47.6	21.0	10.5	320.84002	1-
3	-7.428	-34.902	1802.50151	7.6	2.3	-80.4	69.8	84.74752	0.998	-85.6	53.1	53.2	7.0	-0.5	251.41265	2-3
4	-7.139	-29.211	1816.12169	-55.3	4.1	-81.4	50.4	85.90853	0.982	-85.2	58.7	47.8	12.2	10.6	171.22496	3-4
5	-6.832	-23.215	1865.33322	-71.7	5.8	-82.2	36.7	87.79920	0.932	-84.7	64.6	42.4	22.5	22.0	180.48410	4-5
6	-12.889	-22.409	1908.89304	-49.4	8.5	-81.4	47.9	90.28926	0.882	-90.2	66.0	42.2	28.6	22.4	185.04836	5-6
7	-19.624	-21.141	1999.87123	-35.8	12.4	-81.5	56.0	94.18195	0.794	-95.7	68.1	42.5	38.1	21.3	207.29614	6-7
8	-19.630	-27.992	1939.22372	-19.0	7.5	-78.2	67.7	91.73092	0.851	-95.2	61.8	47.9	32.2	8.6	195.45752	7-
9	-19.783	-34.407	1921.89003	1.8	2.5	-74.8	81.2	90.45871	0.872	-94.8	55.9	53.2	30.2	-3.5	182.95329	8-9
10	-13.297	-34.668	1841.22168	3.0	2.4	-77.2	77.2	87.08966	0.954	-90.2	54.2	53.0	18.3	-1.0	196.62488	9-10
11	-7.428	-34.902	1802.50151	7.6	2.3	-80.4	69.8	84.74752	0.998	-85.6	53.1	53.2	7.0	-0.5	177.88923	10-11
12	-2.869	-40.597	1815.19940	102.8	1.3	-83.2	6.7	82.51151	0.989	-82.2	47.0	58.9	11.9	-11.9	220.38246	11-12
13	-2.581	-35.098	1797.02975	161.0	2.3	-83.5	59.3	82.11446	0.981	-81.6	52.5	53.7	2.8	-1.3	166.59236	12-13
14	-2.241	-29.531	1810.53006	-105.1	3.2	-83.6	35.9	84.66862	0.999	-80.9	58.0	48.4	10.4	9.5	168.80379	13-14
15	-1.832	-23.673	1858.52190	-97.3	3.9	-83.3	23.5	86.47133	0.950	-80.0	63.8	43.1	21.4	20.6	177.73256	14-15
16	-1.327	-17.216	1948.06400	-94.8	4.4	-82.7	15.9	89.35882	0.866	-79.0	70.3	38.0	33.1	32.1	196.11362	15-16
17	-6.492	-16.584	1957.59195	-77.8	7.4	-82.7	27.2	90.84077	0.847	-84.2	71.1	37.2	34.1	33.9	157.59830	16-17
18	-12.767	-15.365	2009.02226	-60.6	11.5	-83.4	37.8	93.69762	0.792	-90.2	72.8	36.8	39.0	35.0	193.51088	17-18
19	-19.818	-13.300	2116.52386	-47.7	17.2	-85.4	46.2	98.32117	0.693	-96.3	75.5	37.2	47.3	35.2	221.82972	18-19
20	-28.577	-9.369	2316.79926	-38.5	27.1	-90.9	52.8	106.26518	0.527	-102.2	80.0	38.2	59.4	35.8	286.61254	19-20
21	-27.728	-18.964	2160.96506	-27.6	19.1	-83.6	62.1	100.41854	0.653	-101.1	71.5	43.3	50.3	18.6	257.45214	20-21
22	-27.421	-26.858	2083.84705	-14.0	11.1	-78.4	72.6	97.22140	0.720	-100.1	64.7	48.6	45.0	4.3	212.09420	21-22
23	-27.456	-34.085	2060.94281	1.3	3.0	-73.7	84.1	95.65136	0.745	-99.3	58.6	53.8	43.2	-8.9	194.26927	22-23
24	-27.785	-41.202	2085.11444	16.5	-5.4	-68.7	6.3	95.40359	0.732	-98.6	52.8	59.0	45.1	-21.6	191.21969	23-24
25	-20.073	-40.736	1943.47353	22.2	-2.6	-70.8	5.8	90.18738	0.861	-94.4	50.3	58.5	32.6	-15.4	233.94506	24-25
26	-13.576	-40.551	1861.33580	33.4	-0.9	-74.4	5.6	86.82053	0.944	-90.2	48.7	58.4	21.9	-12.4	196.88326	25-26
27	-7.709	-40.524	1821.51863	59.7	0.4	-78.8	6.2	84.62798	0.993	-85.9	47.6	58.5	13.7	-11.4	177.71162	26-27
28	-2.869	-40.597	1815.19940	102.8	1.3	-83.2	6.7	82.51151	0.989	-82.2	47.0	58.9	11.9	-11.9	146.60629	27-28

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JULY 31, 1964 13 HR 11 MIN 36 SEC 398 MS

TAB NO 33

ATLAS PHOTO NO 33

POD SEQUENCE NO 72

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				852.402			1786.18884	-3.920	-34.533	3521.644	1.993	-73.822	116.871			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.896	-17.945	1950.73932	-12.6	6.9	-77.4	71.0	89.14142	0.899	-93.2	70.2	38.6	34.4	30.8	0.	0-
2	-13.065	-28.653	1846.17390	-29.3	5.5	-79.4	60.7	87.73815	0.934	-90.2	60.0	47.6	21.0	10.6	318.61659	1-2
3	-7.454	-34.813	1792.72572	6.9	2.3	-80.4	69.5	84.29166	0.998	-85.6	53.2	53.2	7.0	-0.4	250.12881	2-3
4	-7.166	-29.151	1806.49744	-55.4	4.1	-81.4	50.3	85.45319	0.982	-85.2	58.7	47.8	12.3	10.7	170.32426	3-4
5	-6.861	-23.186	1855.55869	-71.7	5.8	-82.2	36.7	87.34077	0.932	-84.7	64.6	42.4	22.6	22.1	179.57469	4-5
6	-12.887	-22.382	1899.00209	-49.4	8.5	-81.4	47.9	89.82142	0.881	-90.2	66.0	42.2	28.7	22.4	184.10175	5-6
7	-19.586	-21.121	1989.45233	-35.9	12.4	-81.5	55.9	93.69135	0.794	-95.7	68.1	42.5	38.1	21.3	206.19360	6-7
8	-19.591	-27.936	1928.96370	-19.2	7.5	-78.2	67.6	91.24551	0.851	-95.2	61.8	47.9	32.1	8.7	194.47988	7-8
9	-19.742	-34.316	1911.45468	1.7	2.6	-74.9	81.0	89.96729	0.873	-94.8	56.0	53.2	30.2	-3.4	181.99739	8-9
10	-13.291	-34.578	1831.28813	2.7	2.4	-77.2	76.9	88.68190	0.954	-90.2	54.3	53.0	18.2	-0.9	195.53244	9-10
11	-7.454	-34.813	1792.72572	6.9	2.3	-80.4	69.5	84.29166	0.998	-85.6	53.2	53.2	7.0	-0.4	176.93744	10-11
12	-2.921	-40.476	1804.93112	102.6	1.3	-83.1	5.7	82.00558	0.988	-82.2	47.1	58.9	11.8	-11.8	219.13585	11-12
13	-2.633	-35.009	1787.16800	162.4	2.3	-83.5	59.0	81.65807	0.981	-81.6	52.6	53.7	2.7	-1.2	165.63028	12-13
14	-2.294	-29.471	1800.81239	-104.7	3.2	-83.5	36.0	84.21391	0.999	-80.9	58.1	48.4	10.4	9.6	167.90440	13-14
15	-1.887	-23.643	1848.68864	-97.2	3.9	-83.3	23.7	86.01328	0.950	-80.0	63.9	43.1	21.4	20.6	176.82255	14-15
16	-1.385	-17.219	1937.74272	-94.7	4.4	-82.6	16.0	88.68725	0.866	-79.0	70.3	38.0	33.1	32.1	195.09749	15-16
17	-6.523	-16.588	1947.43205	-77.7	7.4	-82.7	27.3	90.36889	0.847	-84.2	71.1	37.2	34.1	33.9	156.78291	16-17
18	-12.766	-15.374	1998.66370	-60.6	11.5	-83.4	37.8	93.21450	0.792	-90.2	72.8	36.8	38.9	35.0	192.52677	17-18
19	-19.779	-13.322	2105.50104	-47.7	17.2	-85.4	46.2	97.80940	0.694	-96.3	75.4	37.2	47.3	35.1	220.62653	18-19
20	-28.482	-9.432	2304.69750	-38.6	27.0	-90.8	52.8	105.68302	0.529	-102.2	80.0	38.2	59.3	35.7	284.65042	19-20
21	-27.641	-18.961	2149.35565	-27.7	19.0	-83.6	62.0	99.87901	0.654	-101.1	71.5	43.3	50.2	18.7	255.90256	20-21
22	-27.335	-26.807	2012.33444	-1.1	11.1	-78.5	73.4	96.69308	0.721	-100.1	64.7	48.6	44.9	4.4	210.99207	21-22
23	-27.366	-33.991	2049.43940	1.2	3.0	-73.8	83.9	95.11683	0.746	-99.3	58.0	53.5	12.1	8.7	193.35644	22-23
24	-27.688	-41.058	2072.95715	16.4	-5.3	-68.8	6.0	94.84659	0.733	-98.7	52.9	59.0	44.9	-21.4	190.06280	23-24
25	-20.028	-40.607	1932.52382	22.1	-2.5	-71.0	5.5	89.67894	0.862	-94.4	50.4	58.5	32.5	-15.3	232.36198	24-25
26	-13.568	-40.428	1850.95308	33.2	-0.9	-74.5	5.2	86.33624	0.945	-90.2	48.8	58.4	21.8	-12.3	195.73377	25-26
27	-7.733	-40.404	1811.32518	59.4	0.4	-78.8	5.6	84.15456	0.994	-85.9	47.7	58.5	13.7	-11.3	176.72534	26-27
28	-2.921	-40.476	1804.93112	102.6	1.3	-83.1	5.7	82.00558	0.988	-82.2	47.1	58.9	11.8	-11.8	145.78570	27-28

JULY 31, 1964 13 HR 11 MIN 41 SEC 518 MS

TAB NO 34

ATLAS PHOTO NO 34

POD SEQUENCE NO 74

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				847.282		1776.38397	-3.941	-34.492	3511.839	1.995	-73.791	116.865				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.887	-17.463	1940.18338	-12.7	6.9	-77.4	70.8	88.66670	0.899	-93.2	70.2	38.6	34.4	30.7	0.	0-1
2	-13.061	-28.595	1836.39337	-29.4	5.5	-79.4	60.6	87.27334	0.933	-90.2	60.0	47.6	21.0	10.6	316.39384	1-2
3	-7.480	-34.724	1782.94408	6.1	2.3	-80.4	69.2	83.83571	0.998	-85.6	53.3	53.2	7.0	-0.3	248.84368	2-3
4	-7.194	-29.092	1796.86491	-55.4	4.1	-81.4	50.3	84.99746	0.981	-85.2	58.8	47.8	12.3	10.8	169.42299	3-4
5	-6.890	-23.156	1845.85403	-71.6	5.8	-82.2	36.7	86.88186	0.931	-84.7	64.6	42.4	22.6	22.1	178.66408	4-5
6	-12.885	-22.355	1889.09981	-49.4	8.5	-81.4	47.8	89.35304	0.881	-90.2	66.0	42.2	28.7	22.5	183.15383	5-6
7	-19.548	-21.101	1979.02161	-36.0	12.4	-81.5	55.9	93.20019	0.794	-95.7	68.1	42.5	38.1	21.4	205.08973	6-7
8	-19.552	-27.881	1918.69420	-19.3	7.5	-78.3	67.4	90.75964	0.851	-95.2	61.9	47.9	32.1	8.7	193.50072	7-8
9	-19.700	-34.225	1901.01241	1.5	2.6	-74.9	80.7	89.47558	0.873	-94.8	56.1	53.2	30.1	-3.3	181.04086	8-9
10	-13.286	-34.489	1821.34798	2.4	2.4	-77.3	76.6	86.14963	0.954	-90.2	54.4	53.0	18.2	-0.8	194.43968	9-10
11	-7.480	-34.724	1782.94408	6.1	2.3	-80.4	69.2	83.83571	0.998	-85.6	53.3	53.2	7.0	-0.3	175.98494	10-11
12	-2.972	-40.355	1794.66199	102.5	1.3	-83.1	4.8	81.50057	0.988	-82.2	47.3	58.9	11.7	-11.6	217.88999	11-12
13	-2.686	-34.919	1777.30179	163.8	2.3	-83.4	58.7	81.20183	0.981	-81.6	52.7	53.7	2.6	-1.1	164.66891	12-13
14	-2.347	-29.411	1791.08783	-104.2	3.2	-83.5	36.0	83.75890	0.999	-80.9	58.1	48.4	10.5	9.7	167.00461	13-14
15	-1.943	-23.613	1838.84679	-97.0	3.9	-83.2	23.8	85.55483	0.950	-80.0	63.9	43.1	21.5	20.6	175.91150	14-15
16	-1.443	-17.222	1927.47169	-94.6	4.5	-82.6	16.2	88.41525	0.866	-79.0	70.3	37.9	33.1	32.1	194.08009	15-16
17	-6.554	-16.592	1937.26060	-77.6	7.4	-82.7	27.3	89.89648	0.847	-84.2	71.1	37.2	34.1	33.9	155.96683	16-17
18	-12.764	-15.383	1988.29222	-60.6	11.5	-83.4	37.8	92.73079	0.792	-90.2	72.8	36.8	38.9	35.0	191.54120	17-18
19	-19.740	-13.345	2094.46503	-47.7	17.2	-85.4	46.2	97.29703	0.694	-96.3	75.4	37.2	47.3	35.6	219.42233	18-19
20	-28.387	-9.495	2291.38947	-38.6	26.9	-90.8	52.8	105.10056	0.530	-102.2	79.9	38.2	59.2	35.6	282.69303	19-20
21	-27.554	-18.959	2137.73712	-27.7	19.0	-83.6	61.9	99.33905	0.655	-101.1	71.5	43.3	50.2	18.7	254.35438	20-21
22	-27.248	-26.757	2061.20822	-14.2	11.1	-78.5	72.3	96.16443	0.722	-100.1	64.7	48.6	44.8	4.5	209.88857	21-22
23	-27.276	-33.897	2037.93301	1.1	3.1	-73.9	83.7	94.58218	0.747	-99.3	58.7	53.8	43.1	-8.6	192.20193	22-23
24	-27.590	-40.916	2060.80511	16.2	-5.2	-69.0	5.8	94.28984	0.735	-98.7	53.0	59.0	44.8	-21.3	188.90847	23-24
25	-19.982	-40.478	1921.57277	21.9	-2.5	-71.1	5.2	89.17045	0.863	-94.4	50.5	58.5	32.4	-15.2	230.78352	24-25
26	-13.560	-40.305	1840.56761	32.9	-0.8	-74.5	4.9	85.85183	0.945	-90.2	48.9	58.4	21.8	-12.1	194.58488	25-26
27	-7.758	-40.283	1801.12949	59.0	0.4	-78.9	5.0	83.68104	0.994	-85.9	47.8	58.5	13.6	-11.1	175.73867	26-27
28	-2.972	-40.355	1794.66199	102.5	1.3	-83.1	4.8	81.50057	0.988	-82.2	47.3	58.9	11.7	-11.6	144.96501	27-28

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JULY 31, 1964 13 HR 11 MIN 46 SEC 638 MS TAB NO 35 ATLAS PHOTO NO 35 POD SEQUENCE NO 76

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				842.162	1766.57108	-3.962	-34.450	3502.026	1.997	-73.759	116.860					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.878	-17.982	1929.61754	-12.9	6.9	-77.5	70.6	88.19203	0.899	-93.2	70.1	38.6	34.4	30.7	0.	0-1
2	-13.058	-28.536	1826.60947	-29.5	5.5	-79.5	60.5	86.80836	0.933	-90.2	60.1	47.6	21.1	10.7	314.17255	1-2
3	-7.507	-34.636	1773.15916	5.3	2.3	-80.4	68.9	83.38003	0.998	-85.6	53.4	53.2	7.0	-0.2	247.55823	2-3
4	-7.222	-29.033	1787.22545	-55.4	4.2	-81.4	50.2	84.54141	0.981	-85.2	58.9	47.8	12.4	10.8	168.52125	3-4
5	-6.919	-23.127	1836.09926	-71.5	5.9	-82.1	36.8	86.42248	0.931	-84.7	64.7	42.4	22.7	22.1	177.75197	4-5
6	-12.883	-22.329	1879.19112	-49.5	8.5	-81.4	47.8	88.88435	0.881	-90.2	66.0	42.2	28.7	22.5	182.20607	5-6
7	-19.510	-21.081	1968.59056	-36.0	12.4	-81.6	55.8	92.70902	0.794	-95.7	68.2	42.5	38.1	21.4	203.98840	6-7
8	-19.513	-27.825	1908.42711	-19.4	7.6	-78.3	67.3	90.27390	0.851	-95.2	61.9	47.9	32.1	8.8	192.52092	7-8
9	-19.659	-34.134	1890.57681	1.3	2.6	-75.0	80.5	88.98417	0.873	-94.8	56.2	53.2	30.1	-3.2	180.08473	8-9
10	-13.261	-34.400	1811.40823	2.1	2.4	-77.3	76.3	89.67947	0.954	-90.2	54.5	53.0	18.2	-0.7	193.34765	9-10
11	-7.507	-34.636	1773.15916	5.3	2.3	-80.4	68.9	83.38003	0.998	-85.6	53.4	53.2	7.0	-0.2	175.03308	10-11
12	-3.024	-40.234	1784.39226	102.3	1.3	-83.1	3.9	80.99649	0.987	-82.2	47.4	58.9	11.5	-11.5	216.64496	11-12
13	-2.739	-34.830	1767.43018	165.3	2.3	-83.4	58.4	80.74561	0.981	-81.6	52.7	53.7	2.5	-1.0	163.70832	12-13
14	-2.401	-29.351	1781.35416	-103.8	3.2	-83.4	36.1	83.30345	0.999	-80.9	58.2	48.4	10.5	9.7	166.10412	13-14
15	-1.998	-23.584	1828.99251	-96.8	4.0	-83.2	23.9	85.09580	0.950	-80.0	63.9	43.1	21.5	20.7	174.98869	14-15
16	-1.501	-17.226	1917.18501	-94.5	4.5	-82.6	16.3	87.94252	0.866	-79.0	70.3	37.9	33.1	32.1	193.06013	15-16
17	-6.585	-16.597	1927.07607	-77.6	7.4	-82.7	27.4	89.42345	0.847	-84.2	71.1	37.2	34.1	33.9	155.14979	16-17
18	-12.763	-15.392	1977.91182	-60.6	11.5	-83.3	37.9	92.24665	0.792	-90.2	72.7	36.8	38.9	35.0	190.55589	17-18
19	-19.701	-13.368	2083.42755	-47.8	17.1	-85.4	46.1	96.78456	0.694	-96.3	75.4	37.2	47.2	35.1	218.22128	18-19
20	-28.293	-9.557	2278.70163	-38.6	26.8	-90.8	52.7	104.51901	0.532	-102.2	79.8	38.2	59.1	35.6	280.15232	19-20
21	-27.467	-18.955	2126.13162	-27.8	18.9	-83.6	61.9	98.79970	0.656	-101.1	71.5	43.3	50.1	18.7	252.81191	20-21
22	-27.162	-26.707	2049.89969	-14.3	11.1	-78.6	72.2	95.63647	0.723	-100.1	64.7	48.6	44.8	4.6	208.78584	21-22
23	-27.187	-33.802	2026.44633	0.9	3.2	-74.0	83.6	94.04844	0.748	-94.3	58.7	53.8	43.0	-8.4	191.16951	22-23
24	-27.494	-40.773	2048.68304	16.1	-5.1	-69.1	5.6	93.73445	0.737	-98.7	53.1	59.0	44.7	-21.1	187.75898	23-24
25	-19.937	-40.349	1910.63513	21.7	-2.4	-71.2	4.9	88.66257	0.864	-94.4	50.7	58.5	32.4	-15.0	229.21698	24-25
26	-13.552	-40.182	1830.18794	32.6	-0.8	-74.6	4.5	85.36767	0.946	-90.2	49.0	58.4	21.7	-12.0	293.44000	25-26
27	-7.783	-40.162	1790.93536	58.6	0.4	-78.9	3.9	83.20758	0.994	-85.9	48.0	58.5	13.5	-11.0	174.75336	26-27
28	-3.024	-40.234	1784.39226	102.3	1.3	-83.1	3.9	80.99649	0.987	-82.2	47.4	58.9	11.5	-11.5	144.14468	27-28

JULY 31, 1964 13 HR 11 MIN 51 SEC 757 MS TAB NO 36 ATLAS PHOTO NO 36 POD SEQUENCE NO 78

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				837.042	1756.75009	-3.983	-34.408	3492.205	1.999	-73.727	116.855					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.869	-18.000	1919.04134	-13.1	6.9	-77.5	70.5	87.71729	0.899	-93.2	70.1	38.6	34.3	30.7	0.	0-1
2	-13.055	-28.478	1816.82076	-29.7	5.5	-79.5	60.3	86.34316	0.933	-90.2	60.1	47.6	21.1	10.8	311.95226	1-2
3	-7.534	-34.547	1763.37024	4.6	2.3	-80.4	68.6	82.92455	0.999	-85.6	53.4	53.2	7.1	-0.1	246.27253	2-3
4	-7.250	-28.974	1777.57860	-55.4	4.2	-81.4	50.1	84.08501	0.981	-85.2	58.9	47.8	12.5	10.9	167.61901	3-4
5	-6.944	-23.098	1826.33430	-71.5	5.9	-82.1	36.8	85.96262	0.931	-84.7	64.7	42.4	22.7	22.2	176.83838	4-5
6	-12.881	-22.302	1869.27486	-49.5	8.5	-81.4	47.7	88.41531	0.881	-90.2	66.1	42.2	28.7	22.5	181.25826	5-6
7	-19.473	-21.061	1958.15660	-36.1	12.4	-81.6	55.7	92.21771	0.794	-95.7	68.2	42.5	38.1	21.4	202.88862	6-7
8	-19.475	-27.769	1898.15976	-19.5	7.6	-78.4	67.1	89.78814	0.851	-95.2	62.0	47.9	32.1	8.9	191.54028	7-8
9	-19.619	-34.043	1880.14494	1.1	2.7	-75.1	80.3	88.49295	0.873	-94.8	56.2	53.2	30.0	-3.1	179.12877	8-9
10	-13.276	-34.310	1801.46725	1.8	2.4	-77.3	76.1	85.20925	0.954	-90.2	54.6	53.0	18.2	-0.7	192.26202	9-10
11	-7.534	-34.547	1763.37024	4.6	2.3	-80.4	68.6	82.92455	0.999	-85.6	53.4	53.2	7.1	-0.1	174.08165	10-11
12	-3.077	-40.114	1774.12163	102.1	1.3	-83.0	2.9	80.49331	0.987	-82.2	47.5	58.9	11.4	-11.4	215.40048	11-12
13	-2.792	-34.741	1757.55313	166.9	2.3	-83.3	58.2	80.28942	0.981	-81.6	52.8	53.7	2.5	-0.9	162.74848	12-13
14	-2.456	-29.292	1771.61166	-103.4	3.2	-83.4	36.1	82.84760	0.999	-80.9	58.3	48.4	10.6	9.8	165.20296	13-14
15	-2.054	-23.554	1819.12651	-96.6	4.0	-83.2	24.1	84.63624	0.949	-80.0	64.0	43.1	21.5	20.7	174.08428	14-15
16	-1.560	-17.230	1906.88387	-94.4	4.5	-82.6	16.5	87.46912	0.866	-79.0	70.3	37.9	33.1	32.1	192.03785	15-16
17	-6.616	-16.601	1916.87871	-77.5	7.4	-82.6	27.5	88.94982	0.847	-84.2	71.1	37.2	34.1	33.9	154.33202	16-17
18	-12.762	-15.402	1967.52165	-60.6	11.5	-83.3	37.9	91.76204	0.792	-90.2	72.7	36.8	38.9	34.9	189.57024	17-18
19	-19.663	-13.391	2072.38611	-47.8	17.1	-85.4	46.1	96.27189	0.695	-96.3	75.4	37.2	47.2	35.1	217.02255	18-19
20	-28.200	-9.617	2266.02798	-38.7	26.7	-90.7	52.7	103.93810	0.533	-102.2	79.8	38.2	59.0	35.5	278.82521	19-20
21	-27.381	-18.951	2114.53433	-27.9	18.9	-83.6	61.8	98.26073	0.657	-101.1	71.5	43.3	50.1	18.7	251.27408	20-21
22	-27.077	-26.656	2038.60075	-14.4	11.1	-78.6	72.0	95.10894	0.724	-100.1	64.7	48.6	44.7	4.7	207.68346	21-22
23	-27.098	-33.708	2014.97421	0.8	3.2	-74.1	83.4	93.51538	0.749	-94.3	58.8	53.8	42.9	-8.3	190.11809	22-23
24	-27.399	-40.631	2036.58528	15.9	-5.0	-69.2	5.3	93.18015	0.738	-98.7	53.1	59.0	44.6	-20.9	186.61375	23-24
25	-19.892	-40.220	1899.10743	21.5	-2.3	-71.3	4.6	88.15514	0.864	-94.4	50.8	58.5	32.3	-14.9	227.66089	24-25
26	-13.545	-40.059	1819.81203	32.3	-0.8	-76.7	4.1	84.88367	0.946	-90.2	49.2	58.4	21.6	-11.9	192.29833	25-26
27	-7.809	-40.042	1780.74178	58.2	0.4	-78.9	3.9	82.73413	0.995	-85.9	48.1	58.5	13.4	-10.9	173.76901	26-27
28	-3.077	-40.114	1774.12163	102.1	1.3	-83.0	2.9	80.49331	0.987	-82.2	47.5	58.9	11.4	-11.4	143.32428	27-28

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JULY 31, 1964 13 HR 11 MIN 56 SEC 877 MS

TAB NO 37

ATLAS PHOTO NO 37

POD SEQUENCE NO 80

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				831.922	1746.92093	-4.004	-34.366	3482.376	2.001	-73.695	116.849					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.860	-18.019	1908.45490	-13.2	6.9	-77.6	70.3	87.24209	0.899	-93.2	70.1	38.6	34.3	30.6	0.	0-1
2	-13.053	-28.420	1807.02226	-29.8	5.6	-79.5	60.2	85.87750	0.933	-90.2	60.2	47.6	21.1	10.8	309.73291	1-2
3	-7.561	-34.458	1753.57506	3.9	2.4	-80.3	68.3	82.46894	0.999	-85.6	53.5	53.2	7.1	0.0	244.98531	2-3
4	-7.278	-28.915	1767.92310	-55.5	4.2	-81.4	50.0	83.62820	0.981	-85.2	59.0	47.8	12.6	11.0	166.71611	3-4
5	-6.978	-22.276	1859.34674	-71.4	5.9	-82.1	36.8	85.50226	0.931	-84.7	64.7	42.4	22.7	22.2	175.92351	4-5
6	-12.880	-21.041	1947.71010	-36.1	12.3	-81.6	47.7	87.94571	0.881	-90.2	66.1	42.2	28.8	22.6	180.30913	5-6
7	-19.435	-27.713	1887.88222	-19.6	7.6	-78.4	67.0	89.30189	0.851	-95.7	68.2	42.5	38.1	21.5	201.78757	6-7
8	-19.437	-33.952	1869.70604	0.9	2.7	-75.2	80.1	88.00139	0.874	-94.8	56.3	53.2	30.0	9.0	190.55799	7-8
9	-19.578	-34.221	1791.51910	1.5	2.5	-77.4	75.8	84.73870	0.954	-90.2	54.6	53.0	18.2	-0.6	191.17365	8-9
10	-13.272	-34.458	1753.57506	3.9	2.4	-80.3	68.3	82.46894	0.999	-85.6	53.5	53.2	7.1	0.0	173.12958	9-10
11	-7.561	-39.994	1763.84982	101.9	1.3	-83.0	2.0	79.99101	0.987	-82.2	47.6	58.9	11.3	-11.2	214.15673	10-11
12	-3.130	-34.652	1747.67133	168.7	2.3	-83.3	57.9	79.83336	0.981	-81.6	52.9	53.7	2.4	-0.8	161.78930	11-12
13	-2.845	-29.233	1761.86198	-103.0	3.2	-83.4	36.2	82.39142	0.999	-80.9	58.3	48.4	10.6	9.9	164.30134	12-13
14	-2.510	-23.525	1809.25153	-96.4	4.0	-83.1	24.2	84.17626	0.949	-80.0	64.0	43.1	21.5	20.7	173.16874	13-14
15	-1.618	-17.234	1896.57265	-94.3	4.6	-82.5	16.6	86.99528	0.867	-79.0	70.3	37.9	33.0	32.1	191.01434	14-15
16	-6.648	-16.606	1906.66937	-77.5	7.5	-82.6	27.6	88.47564	0.847	-84.2	71.1	37.1	34.1	33.9	153.51343	15-16
17	-12.761	-15.411	1957.11790	-60.6	11.5	-83.3	37.9	91.27679	0.792	-90.2	72.7	36.8	38.9	34.9	188.58306	16-17
18	-19.624	-13.413	2061.33075	-47.8	17.1	-85.4	46.1	95.75857	0.695	-96.3	75.3	37.2	47.1	35.1	215.82261	17-18
19	-28.106	-9.678	2253.34647	-38.7	26.5	-90.7	52.6	103.35681	0.535	-102.2	79.7	38.2	58.9	35.4	276.90232	18-19
20	-27.295	-18.948	2102.92657	-27.9	18.8	-83.7	61.7	97.72127	0.658	-101.1	71.5	43.3	50.0	18.8	249.73735	19-20
21	-26.991	-26.606	2061.33075	-47.8	17.1	-85.4	46.1	95.75857	0.695	-96.3	75.3	37.2	47.1	35.1	215.82261	20-21
22	-27.010	-33.613	2003.49815	0.7	3.3	-74.2	83.2	92.98214	0.750	-99.3	58.8	53.8	42.8	-8.2	189.10608	21-22
23	-27.304	-40.488	2024.45130	15.8	-4.8	-69.4	5.1	92.62605	0.740	-98.7	53.2	59.0	44.4	-20.7	185.47075	22-23
24	-19.848	-40.488	2024.45130	15.8	-4.8	-69.4	5.1	92.62605	0.740	-98.7	53.2	59.0	44.4	-20.7	185.47075	23-24
25	-13.532	-39.815	1799.06218	31.8	-0.7	-74.8	3.3	83.91578	0.947	-90.2	49.4	58.4	21.5	-11.6	190.01769	24-25
26	-7.834	-39.921	1770.54547	57.8	0.4	-78.9	2.8	81.78737	0.995	-85.9	48.3	58.5	13.2	-10.7	171.80027	25-26
27	-3.130	-39.994	1763.84982	101.9	1.3	-83.0	2.0	79.99101	0.987	-82.2	47.6	58.9	11.3	-11.2	142.50399	26-27

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TAB NO 38

ATLAS PHOTO NO 38

POD SEQUENCE NO 82

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				826.802	1737.08365	-4.026	-34.324	3472.539	2.003	-73.663	116.844					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.851	-18.037	1897.85822	-13.4	6.9	-77.6	70.1	86.76615	0.899	-93.2	70.1	38.6	34.3	30.6	0.	0-1
2	-13.050	-28.364	1797.20296	-29.9	5.6	-79.5	60.1	85.41084	0.932	-90.2	60.2	47.6	21.2	10.9	307.57325	1-2
3	-7.588	-34.371	1743.77412	3.1	2.4	-80.3	68.0	82.01326	0.999	-85.6	53.6	53.2	7.1	0.1	243.69348	2-3
4	-7.307	-28.858	1758.24898	-55.5	4.2	-81.4	49.9	83.17050	0.980	-85.2	59.0	47.8	12.6	11.0	165.81124	3-4
5	-7.008	-22.252	1849.38211	-71.3	5.9	-82.1	36.9	85.04035	0.930	-84.7	64.8	42.4	22.8	22.2	175.00242	4-5
6	-12.878	-21.023	1937.22266	-36.2	12.3	-81.6	47.6	87.47438	0.880	-90.2	66.1	42.2	28.8	22.6	179.35596	5-6
7	-19.398	-27.659	1877.58197	-19.8	7.6	-78.5	66.9	88.81459	0.851	-95.7	68.2	42.5	38.1	21.5	200.68128	6-7
8	-19.398	-33.863	1859.26079	0.8	2.8	-75.2	79.9	87.50955	0.874	-94.8	56.4	53.2	30.0	-2.9	177.21275	7-8
9	-13.267	-34.134	1781.56432	1.2	2.5	-77.4	75.6	84.26783	0.954	-90.2	54.7	53.0	18.2	-0.5	190.08510	8-9
10	-7.588	-34.371	1743.77412	3.1	2.4	-80.3	68.0	82.01326	0.999	-85.6	53.6	53.2	7.1	0.1	172.17649	9-10
11	-3.183	-39.875	1753.58757	101.8	1.3	-82.9	1.2	79.49102	0.986	-82.2	47.7	58.9	11.2	-11.1	212.91472	10-11
12	-2.894	-34.565	1737.78510	170.4	2.3	-83.3	57.7	79.37747	0.981	-81.6	53.0	53.7	2.3	-0.7	160.83225	11-12
13	-2.565	-29.175	1752.09496	-102.6	3.3	-83.3	36.3	81.93444	0.999	-80.9	58.4	48.4	10.6	9.9	163.39784	12-13
14	-2.167	-23.497	1799.34526	-96.3	4.0	-83.1	24.3	83.71486	0.949	-80.0	64.0	43.1	21.5	20.8	172.24735	13-14
15	-1.677	-17.241	1886.21262	-94.2	4.6	-82.5	16.8	86.51926	0.867	-79.0	70.3	37.9	33.0	32.1	189.97952	14-15
16	-6.679	-16.613	1896.40825	-77.4	7.5	-82.6	27.6	87.99909	0.847	-84.2	71.1	37.1	34.1	33.9	152.69069	15-16
17	-12.760	-15.423	1946.65712	-60.5	11.5	-83.3	37.9	90.78889	0.792	-90.2	72.7	36.8	38.9	34.9	187.58983	16-17
18	-19.585	-13.439	2050.20926	-47.8	17.0	-85.4	46.1	95.24217	0.696	-96.3	75.3	37.2	47.1	35.0	214.61309	17-18
19	-27.208	-9.743	2240.58328	-38.7	26.4	-90.6	52.6	102.77175	0.536	-102.2	79.6	38.2	58.8	35.3	274.96446	18-19
20	-26.906	-26.558	2015.96255	-28.0	18.8	-83.7	61.6	97.17962	0.658	-101.1	71.5	43.3	49.9	18.8	248.17537	19-20
21	-26.922	-33.522	1992.01918	0.6	3.3	-74.2	83.0	94.05206	0.725	-100.1	64.8	48.6	44.6	4.8	205.46400	20-21
22	-27.209	-40.349	2012.41820	15.7	-4.7	-69.5	4.9	92.07296	0.741	-98.7	53.3	59.0	44.3	-20.5	188.07063	21-22
23	-19.804	-39.964	1877.85913	21.1	-2.2	-71.5	4.0	87.14064	0.866	-94.4	51.0	58.5	32.1	-14.6	184.33251	22-23
24	-13.532	-39.815	1799.06218	31.8	-0.7	-74.8	3.3	83.91578	0.947	-90.2	49.4	58.4	21.5	-11.6	190.01769	23-24
25	-7.860	-39.803	1760.35756	57.4	0.4	-78.9	2.8	81.78737	0.995	-85.9	48.3	58.5	13.2	-10.7	171.80027	24-25
26	-3.183	-39.875	1753.58757	101.8	1.3	-82.9	1.2	79.49102	0.986	-82.2	47.7	58.9	11.2	-11.1	141.68430	25-26

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TAB NO 39 ATLAS PHOTO NO 39 POD SEQUENCE NO 84														
JULY 31, 1964 13 HR 12 MIN 7 SEC 117 MS														
TRAJECTORY DATA														
SEC TO IMPACT 821.682 ALT 1727.23822 LAT -4.047 LON -34.281 R 3462.694 V 2.005 PTH -73.631 AZ 116.838														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.841	-18.056	1887.25124	-13.5	6.9	-77.7	69.9	86.28956	0.899	-93.2	70.1	38.6	34.2	30.6
2	-13.047	-28.310	1787.36720	-30.1	5.6	-79.6	59.9	84.94340	0.932	-90.2	60.3	47.6	21.2	10.9
3	-7.615	-34.286	1733.96698	2.5	2.4	-80.3	67.7	81.55745	0.999	-85.6	53.7	53.2	7.1	0.2
4	-7.335	-28.802	1748.55923	-55.5	4.2	-81.4	49.9	82.71209	0.980	-85.2	59.1	47.8	12.7	11.1
5	-7.038	-23.017	1796.91689	-71.3	5.9	-82.1	36.9	84.57732	0.930	-84.7	64.8	42.4	22.8	22.2
6	-12.876	-22.229	1839.39107	-49.6	8.6	-81.4	47.6	87.00180	0.880	-90.2	66.1	42.2	28.8	22.6
7	-19.360	-21.007	1926.70586	-36.2	12.3	-81.7	55.5	90.73674	0.795	-95.7	68.2	42.5	38.0	21.5
8	-19.360	-27.607	1867.26404	-19.9	7.6	-78.5	66.7	88.32644	0.851	-95.2	62.1	47.9	32.1	9.1
9	-19.497	-33.775	1848.80865	0.6	2.8	-75.1	79.7	87.01740	0.874	-94.6	56.5	53.2	29.9	-2.8
10	-13.263	-34.048	1771.60248	1.0	2.5	-77.5	75.3	83.79662	0.954	-90.2	54.8	53.0	18.2	-0.4
11	-7.615	-34.286	1733.96698	2.5	2.4	-80.3	67.7	81.55745	0.999	-85.6	53.7	53.2	7.1	0.2
12	-3.236	-39.758	1743.33009	101.6	1.3	-82.9	0.3	78.99268	0.986	-82.2	47.9	58.9	11.0	-11.0
13	-2.952	-34.479	1727.89413	172.2	2.3	-83.2	57.4	78.92168	0.981	-81.6	53.1	53.7	2.2	-0.6
14	-2.619	-29.119	1742.31465	-102.2	3.3	-83.3	36.3	81.47684	0.998	-80.9	58.4	48.4	10.7	10.0
15	-2.223	-23.471	1789.41689	-96.1	4.1	-83.1	24.5	83.25246	0.949	-80.0	64.1	43.1	21.6	20.8
16	-1.736	-17.249	1875.81986	-94.1	4.6	-82.5	16.9	86.04178	0.867	-79.0	70.3	37.9	33.0	32.1
17	-6.710	-16.621	1886.11186	-77.3	7.5	-82.6	27.7	87.52093	0.847	-84.2	71.1	37.2	34.1	33.9
18	-12.759	-15.437	1936.15730	-60.5	11.5	-83.3	37.9	90.29918	0.792	-90.2	72.7	36.8	38.9	34.9
19	-19.546	-13.467	2039.04346	-47.9	17.0	-85.4	46.1	94.72369	0.696	-96.3	75.3	37.2	47.1	35.0
20	-27.917	-9.809	2227.76953	-38.8	26.3	-90.6	52.6	102.18435	0.538	-102.2	79.6	38.2	58.7	35.3
21	-27.121	-18.948	2079.58441	-28.1	18.7	-83.7	61.5	96.63647	0.659	-101.1	71.4	43.3	49.9	18.8
22	-26.820	-26.511	2004.61404	-14.7	11.1	-78.8	71.7	93.52228	0.726	-100.1	64.8	48.6	44.5	4.9
23	-26.834	-33.431	1980.53651	0.4	3.4	-74.3	82.8	91.91536	0.752	-99.3	58.9	53.8	42.7	-7.9
24	-27.115	-40.211	2000.35818	15.5	-4.6	-69.6	4.7	91.52052	0.743	-98.7	53.4	59.0	44.2	-20.3
25	-19.760	-39.839	1866.94617	20.9	-2.2	-71.6	3.7	86.63394	0.867	-94.4	51.1	58.5	32.0	-14.4
26	-13.525	-39.695	1788.69492	31.5	-0.7	-74.9	2.9	83.43219	0.947	-90.2	49.5	58.4	21.4	-11.5
27	-7.886	-39.685	1750.17311	57.0	0.4	-78.9	2.3	81.31432	0.996	-85.9	48.5	58.5	13.2	-10.5
28	-3.236	-39.758	1743.33009	101.6	1.3	-82.9	0.3	78.99268	0.986	-82.2	47.9	58.9	11.0	-11.0

TAB NO 40 ATLAS PHOTO NO 40 POD SEQUENCE NO 86														
JULY 31, 1964 13 HR 12 MIN 12 SEC 237 MS														
TRAJECTORY DATA														
SEC TO IMPACT 816.562 ALT 1717.38434 LAT -4.069 LON -34.238 R 3452.840 V 2.007 PTH -73.598 AZ 116.833														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.832	-18.074	1876.63367	-13.7	6.9	-77.7	69.8	85.81249	0.898	-93.2	70.1	38.7	34.2	30.5
2	-13.044	-28.255	1777.52124	-30.2	5.6	-79.6	59.8	84.47548	0.932	-90.2	60.3	47.6	21.2	11.0
3	-7.642	-34.200	1724.15295	1.8	2.4	-80.3	67.4	81.10145	0.999	-85.6	53.8	53.2	7.2	0.3
4	-7.363	-28.746	1738.86073	-55.5	4.2	-81.4	49.8	82.25325	0.980	-85.2	59.2	47.8	12.7	11.1
5	-7.068	-22.991	1787.07323	-71.2	5.9	-82.1	36.9	84.11379	0.930	-84.7	64.8	42.4	22.8	22.3
6	-12.875	-22.207	1829.38802	-49.6	8.6	-81.4	47.6	86.52865	0.880	-90.2	66.2	42.2	28.8	22.6
7	-19.322	-20.992	1916.17651	-36.3	12.3	-81.7	55.4	90.24093	0.795	-95.7	68.2	42.5	38.0	21.5
8	-19.321	-27.554	1856.93550	-20.0	7.6	-78.5	66.6	87.83780	0.851	-95.2	62.1	47.9	32.1	9.1
9	-19.456	-33.688	1838.34875	0.4	2.8	-75.4	74.5	86.52489	0.875	-94.8	56.5	53.2	29.9	-2.7
10	-13.258	-33.962	1761.63278	0.7	2.5	-77.5	75.1	83.32505	0.954	-90.2	54.9	53.0	18.2	-0.4
11	-7.642	-34.200	1724.15295	1.8	2.4	-80.3	67.4	81.10145	0.999	-85.6	53.8	53.2	7.2	0.3
12	-3.288	-39.640	1733.07042	101.4	1.3	-82.8	89.5	78.49507	0.985	-82.2	48.0	58.9	10.9	-10.9
13	-3.006	-34.393	1717.99170	174.2	2.4	-83.2	57.2	78.46595	0.981	-81.6	53.2	53.7	2.2	-0.5
14	-2.674	-29.062	1732.52669	-101.8	3.3	-83.3	36.4	81.01890	0.998	-80.9	58.5	48.4	10.7	10.0
15	-2.279	-23.445	1779.47947	-95.9	4.1	-83.0	24.6	82.78963	0.949	-80.0	64.1	43.1	21.6	20.8
16	-1.795	-17.257	1865.41718	-93.9	4.7	-82.5	17.1	85.56386	0.867	-79.0	70.3	37.9	33.0	32.1
17	-6.742	-16.630	1875.80367	-77.3	7.5	-82.6	27.8	87.04223	0.847	-84.2	71.1	37.2	34.1	33.9
18	-12.758	-15.451	1925.64423	-60.5	11.5	-83.3	37.9	89.80885	0.792	-90.2	72.7	36.8	38.9	34.9
19	-19.507	-13.495	2027.86420	-47.9	17.0	-85.4	46.0	94.20459	0.697	-96.3	75.2	37.2	47.0	35.0
20	-27.822	-9.876	2214.94928	-38.8	26.2	-90.5	52.5	101.59665	0.540	-102.2	79.5	38.2	58.6	35.2
21	-27.034	-18.949	2067.88712	-28.1	18.6	-83.7	61.5	96.09285	0.660	-101.1	71.4	43.3	49.8	18.8
22	-26.734	-26.465	1993.25687	-14.8	11.1	-78.8	71.5	92.99210	0.727	-100.1	64.8	48.6	44.5	5.0
23	-26.745	-33.341	1969.04893	0.3	3.4	-74.4	82.7	91.38169	0.753	-99.3	58.9	53.8	42.6	-7.8
24	-27.020	-40.074	1988.30029	15.4	-4.5	-69.7	4.4	90.96819	0.744	-98.7	53.5	59.0	44.1	-20.1
25	-19.715	-39.714	1856.02975	20.8	-2.1	-71.7	3.4	86.12709	0.867	-94.4	51.2	58.5	32.0	-14.3
26	-13.518	-39.576	1778.32329	31.2	-0.6	-74.9	2.6	82.94840	0.948	-90.2	49.6	58.4	21.4	-11.4
27	-7.911	-39.568	1739.98492	56.6	0.5	-78.9	1.8	80.84111	0.996	-85.9	48.6	58.5	13.1	-10.4
28	-3.288	-39.640	1733.07042	101.4	1.3	-82.8	89.5	78.49507	0.985	-82.2	48.0	58.9	10.9	-10.9

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JULY 31, 1964 13 HR 12 MIN 17 SEC 357 MS

TAB NO 41

ATLAS PHOTO NO 41

POD SEQUENCE NO 88

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
PHOTO DATA				811.442		1707.52243	-4.091	-34.195	3442.978	2.009	-73.566	116.827				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.823	-18.093	1866.00601	-13.9	6.9	-77.7	69.6	85.33402	0.898	-93.2	70.0	38.7	34.1	30.5	0.	0-1
2	-13.04C	-28.201	1767.64989	-30.3	5.6	-79.6	59.7	84.00635	0.932	-90.2	60.4	47.6	21.3	11.0	301.22277	1-2
3	-7.667	-34.115	1714.32805	1.1	2.4	-80.3	67.2	80.64464	0.999	-85.6	53.9	53.2	7.2	0.4	239.79928	2-3
4	-7.390	-28.691	1729.14606	-55.5	4.2	-81.3	49.7	81.79366	0.980	-85.2	59.2	47.8	12.8	11.2	163.08918	3-4
5	-7.096	-22.967	1777.20778	-71.1	6.0	-82.1	37.0	83.64924	0.930	-84.7	64.8	42.4	22.9	22.3	172.22082	4-5
6	-12.872	-22.185	1819.35278	-49.6	8.6	-81.4	47.5	86.05398	0.880	-90.2	66.2	42.2	28.8	22.6	176.48047	5-6
7	-19.283	-20.977	1905.60181	-36.4	12.3	-81.7	55.4	89.74298	0.795	-95.7	68.2	42.5	38.0	9.2	186.56858	6-7
8	-19.281	-27.503	1846.57045	-20.1	7.6	-78.6	66.5	87.34743	0.851	-95.2	62.2	47.9	32.0	9.2	186.56858	7-8
9	-19.414	-33.602	1827.85970	0.3	2.9	-75.4	79.2	86.03101	0.875	-94.8	56.6	53.2	29.9	-2.6	174.32364	8-9
10	-13.252	-33.876	1751.64375	0.5	2.6	-77.5	74.8	82.85256	0.954	-90.2	55.0	53.0	18.2	-0.2	186.81022	9-10
11	-7.667	-34.115	1714.32805	1.1	2.4	-80.3	67.2	80.64464	0.999	-85.6	53.9	53.2	7.2	0.4	169.31023	10-11
12	-3.340	-39.523	1722.81335	101.2	1.3	-82.8	88.7	77.99878	0.985	-82.2	48.1	58.9	10.8	-10.8	209.19395	11-12
13	-3.058	-34.308	1708.09769	176.2	2.4	-83.1	57.0	78.01046	0.981	-81.6	53.3	53.7	2.1	-0.4	157.96734	12-13
14	-2.727	-29.006	1722.73009	-101.5	3.3	-83.2	36.5	80.56055	0.998	-80.9	58.6	48.4	10.8	10.1	160.68138	13-14
15	-2.334	-23.420	1769.52838	-95.8	4.1	-83.0	24.8	82.32621	0.949	-80.0	64.1	43.1	21.6	20.9	169.46693	14-15
16	-1.853	-17.266	1854.99600	-93.8	4.7	-82.4	17.2	85.08515	0.867	-79.0	70.2	37.9	33.0	32.1	186.84811	15-16
17	-6.772	-16.640	1865.46715	-77.2	7.5	-82.6	27.9	86.56225	0.847	-84.2	71.1	37.2	34.1	33.9	150.21021	16-17
18	-12.756	-15.467	1915.09026	-60.5	11.5	-83.3	38.0	89.31664	0.792	-90.2	72.7	36.8	38.9	34.9	184.58712	17-18
19	-19.466	-13.525	2016.62700	-47.9	16.9	-85.4	46.0	93.68281	0.698	-96.3	75.2	37.2	47.0	34.9	210.95276	18-19
20	-27.725	-9.945	2202.04358	-38.8	26.1	-90.5	52.5	101.00503	0.541	-102.2	79.4	38.2	58.5	35.1	269.11695	19-20
21	-26.946	-18.952	2056.12476	-28.2	18.6	-83.7	61.4	95.54621	0.661	-101.1	71.4	43.3	49.7	18.8	243.43389	20-21
22	-26.447	-26.420	1921.84779	-14.9	11.1	-78.9	71.4	92.45051	0.728	-100.1	64.8	48.6	44.4	-7.6	184.95575	21-22
23	-26.655	-33.252	1957.51968	0.2	3.5	-74.5	82.5	90.84610	0.754	-99.3	59.0	59.0	44.0	-19.9	180.93067	22-23
24	-26.924	-39.938	1976.21135	15.3	-4.4	-69.9	4.2	90.41451	0.746	-98.7	53.5	59.0	44.0	-19.9	180.93067	23-24
25	-19.669	-39.589	1845.09187	20.6	-2.0	-71.8	3.2	85.61927	0.868	-94.4	51.2	58.5	31.9	-14.2	219.94708	24-25
26	-13.510	-39.457	1767.93884	31.0	-0.6	-75.0	2.2	82.46403	0.948	-90.2	49.7	58.4	21.3	-11.3	186.59898	25-26
27	-7.936	-39.451	1729.79208	56.2	0.5	-78.9	1.2	80.36768	0.996	-85.9	48.7	58.5	13.0	-10.3	168.84580	26-27
28	-3.340	-39.523	1722.81335	101.2	1.3	-82.8	88.7	77.99878	0.985	-82.2	48.1	58.9	10.8	-10.8	139.22573	27-28

JULY 31, 1964 13 HR 12 MIN 22 SEC 477 MS

TAB NO 42

ATLAS PHOTO NO 42

POD SEQUENCE NO 90

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				806.323	1697.65210	-4.113	-34.151	3433.107	2.011	-73.533	116.821					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.814	-18.112	1855.36772	-14.0	6.9	-77.8	69.4	84.85467	0.898	-93.3	70.0	38.7	34.1	30.5	0.	0-1
2	-13.035	-28.147	1757.76151	-30.4	5.6	-79.6	59.6	83.53642	0.932	-90.2	60.4	47.6	21.3	11.1	299.12929	1-2
3	-7.692	-34.030	1704.49414	0.5	2.4	-80.3	66.9	80.18735	0.999	-85.6	54.0	53.2	7.2	0.4	238.49403	2-3
4	-7.417	-28.636	1719.41887	-55.5	4.3	-81.3	49.7	81.33347	0.979	-85.2	59.3	47.8	12.9	11.2	162.17949	3-4
5	-7.124	-22.942	1767.32671	-71.1	6.0	-82.1	37.0	83.18397	0.930	-84.7	64.9	42.4	22.9	22.3	171.28903	4-5
6	-12.868	-22.164	1809.29680	-49.7	8.6	-81.4	47.5	85.57835	0.880	-90.2	66.2	42.2	28.8	22.7	175.51534	5-6
7	-19.243	-20.963	1895.00049	-36.4	12.3	-81.7	55.3	89.24377	0.795	-95.7	68.2	42.5	38.0	21.6	196.21503	6-7
8	-19.240	-27.452	1836.18353	-20.2	7.6	-78.6	66.3	86.85603	0.852	-95.2	62.2	47.9	32.0	9.3	185.56063	7-8
9	-19.371	-33.515	1817.35344	0.1	2.9	-75.5	79.0	85.53635	0.875	-94.8	56.7	53.2	29.8	-2.5	173.35598	8-9
10	-13.246	-33.791	1741.64156	0.2	2.6	-77.6	74.6	82.37946	0.954	-90.2	55.1	53.0	18.2	-0.1	185.71142	9-10
11	-7.692	-34.030	1704.49414	0.5	2.4	-80.3	66.9	80.18735	0.999	-85.6	54.0	53.2	7.2	0.4	168.35053	10-11
12	-3.390	-39.407	1712.55560	101.0	1.3	-82.8	87.9	77.50342	0.984	-82.2	48.2	58.9	10.7	-10.6	207.95482	11-12
13	-3.109	-34.222	1698.19261	178.4	2.4	-83.1	56.8	77.55509	0.981	-81.6	53.4	53.7	2.0	-0.3	157.01381	12-13
14	-2.780	-28.951	1712.92511	-101.1	3.3	-83.2	36.5	80.10182	0.998	-80.9	58.6	48.4	10.8	10.2	159.77448	13-14
15	-2.389	-23.395	1759.56619	-95.6	4.1	-83.0	24.9	81.86227	0.949	-80.0	64.1	43.1	21.6	20.9	168.53671	14-15
16	-1.910	-17.275	1844.56107	-93.7	4.7	-82.4	17.4	84.60584	0.867	-79.0	70.2	37.9	33.0	32.1	185.79935	15-16
17	-6.802	-16.650	1855.11171	-77.1	7.5	-82.6	28.0	86.08142	0.847	-84.2	71.1	37.2	34.1	33.9	149.38004	16-17
18	-12.753	-15.483	1904.51120	-60.5	11.4	-83.3	38.0	88.82328	0.793	-90.2	72.7	36.8	38.9	34.9	183.57784	17-18
19	-19.425	-13.555	2005.35748	-47.9	16.9	-85.4	46.0	93.15954	0.698	-96.3	75.2	37.2	46.9	34.9	209.71827	18-19
20	-27.628	-10.015	2189.09857	-38.9	26.0	-90.4	52.5	100.44160	0.543	-102.2	79.3	38.2	58.4	35.0	267.14768	19-20
21	-26.856	-18.955	2044.32904	-28.2	18.5	-83.7	61.3	94.99802	0.662	-101.1	71.4	43.3	49.6	18.9	241.83640	20-21
22	-26.558	-26.375	1970.41156	-15.0	11.1	-78.9	71.3	91.92566	0.728	-100.1	64.9	48.6	44.3	-7.5	200.94359	21-22
23	-26.564	-33.164	1945.96977	0.1	3.5	-74.6	82.3	90.30959	0.755	-99.3	59.0	53.8	42.4	-7.5	183.90432	22-23
24	-26.827	-39.803	1964.11002	15.1	-4.3	-70.0	4.0	89.86031	0.747	-98.7	53.6	59.0	43.8	-19.8	179.79705	23-24
25	-19.623	-39.466	1834.14249	20.4	-2.0	-71.9	2.9	85.11095	0.869	-94.4	51.3	58.5	31.8	-14.0	218.40335	24-25
26	-13.501	-39.338	1757.54599	30.7	-0.6	-75.0	1.8	81.97928	0.949	-90.2	49.8	58.4	21.3	-11.1	185.45404	25-26
27	-7.959	-39.335	1719.59456	55.8	0.5	-78.9	0.7	79.89405	0.997	-85.9	48.8	58.5	12.9	-10.2	167.85778	26-27
28	-3.390	-39.407	1712.55560	101.0	1.3	-82.8	87.9	77.50342	0.984	-82.2	48.2	58.9	10.7	-10.6	138.40550	27-28

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TAB NO 43										ATLAS PHOTO NO 43										POD SEQUENCE NO 92									
JULY 31, 1964 13 HR 12 MIN 27 SEC 597 MS																													
TRAJECTORY DATA										SEC TO IMPACT 801.203										ALT 1687.77362									
PHOTO DATA										LAT -4.135										LUN -34.108									
										R 3423.229										V 2.013									
										PTH -73.500										AZ 116.816									
PT LAT LON RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT																													
1	-11.805	-18.130	1844.71912	-14.2	6.9	-77.8	69.3	84.37486	0.898	-93.3	70.0	38.7	34.1	30.5	0.	0-	1												
2	-13.030	-28.094	1747.86340	-30.5	5.6	-79.6	59.5	83.06601	0.932	-90.2	60.5	47.6	21.3	11.1	297.03576	1-	2												
3	-7.718	-33.945	1694.65363	-0.2	2.4	-80.3	66.7	79.72987	0.999	-85.6	54.1	53.2	7.3	0.5	237.18724	2-	3												
4	-7.444	-28.581	1709.68292	-55.5	4.3	-81.3	49.6	80.87286	0.979	-85.2	59.3	47.8	12.9	11.3	161.26911	3-	4												
5	-7.153	-22.918	1757.43521	-71.0	6.0	-82.1	37.0	82.71821	0.929	-84.7	64.9	42.4	22.9	22.3	170.35599	4-	5												
6	-12.865	-22.143	1799.22932	-49.7	8.6	-81.5	47.5	85.10216	0.880	-90.2	66.2	42.2	28.9	22.7	174.54900	5-	6												
7	-19.201	-20.949	1884.38741	-36.5	12.3	-81.7	55.3	88.74401	0.795	-95.7	68.2	42.5	38.0	21.6	195.08905	6-	7												
8	-19.200	-27.402	1825.78671	-20.3	7.6	-78.7	66.2	86.36416	0.852	-95.2	62.2	47.9	32.0	9.3	184.55173	7-	8												
9	-19.328	-33.429	1806.84009	-0.0	2.9	-75.6	78.8	85.04134	0.816	-94.8	56.7	53.2	29.8	-2.4	172.38748	8-	9												
10	-13.239	-33.706	1731.63197	-0.1	2.6	-77.6	74.4	81.90601	0.954	-90.2	55.1	53.0	18.2	-0.0	184.61208	9-	10												
11	-7.718	-33.945	1694.65363	-0.2	2.4	-80.3	66.7	79.72987	0.999	-85.6	54.1	53.2	7.3	0.5	167.39000	10-	11												
12	-3.441	-39.290	1702.29578	100.8	1.3	-82.7	87.2	77.00874	0.984	-82.2	48.4	58.9	10.5	-10.5	206.71601	11-	12												
13	-3.161	-34.137	1688.28220	-179.3	2.4	-83.1	56.6	77.09974	0.981	-81.6	53.5	53.7	2.0	-0.2	156.06067	12-	13												
14	-2.833	-28.895	1703.11264	-100.7	3.3	-83.1	36.6	79.64274	0.998	-80.9	58.7	48.4	10.8	10.2	158.86700	13-	14												
15	-2.444	-23.369	1749.59508	-95.4	4.1	-83.0	25.0	81.39793	0.949	-80.0	64.2	43.1	21.6	20.9	167.60562	14-	15												
16	-1.967	-17.284	1834.11653	-93.6	4.8	-82.4	17.5	84.12610	0.868	-79.0	70.2	37.9	32.9	32.1	148.54895	15-	16												
17	-6.832	-16.660	1844.74489	-77.1	7.6	-82.5	28.0	85.60006	0.847	-84.2	71.1	37.2	34.1	33.9	182.36700	16-	17												
18	-12.750	-15.499	1893.91957	-60.5	11.4	-83.3	38.0	88.32932	0.793	-90.2	72.6	36.8	38.8	34.8	208.48314	17-	18												
19	-19.383	-13.586	1994.07573	-47.9	16.9	-85.4	46.0	92.63569	0.699	-96.3	75.1	37.2	46.9	34.9	265.18425	18-	19												
20	-27.530	-10.085	2176.14944	-38.9	25.9	-90.4	52.4	92.81798	0.545	-102.2	79.3	38.2	58.3	34.9	240.24139	19-	20												
21	-26.766	-18.959	2032.52469	-28.3	18.4	-83.7	61.2	94.49442	0.663	-101.1	71.4	43.3	49.6	18.9	199.80345	20-	21												
22	-26.470	-26.331	1958.96803	-17.1	11.1	-79.0	71.2	91.39146	0.729	-100.1	64.9	48.6	44.3	5.2	182.85728	21-	22												
23	-26.473	-33.076	1936.41618	-0.0	3.6	-74.7	82.1	89.77291	0.756	-99.3	59.1	53.8	42.3	-7.4	178.66517	22-	23												
24	-26.729	-19.668	1952.01180	15.0	-4.1	-70.1	3.7	89.30625	0.744	-96.7	53.7	59.0	43.7	-19.6	216.86363	23-	24												
25	-19.576	-39.342	1823.19032	20.2	-1.9	-72.0	2.6	84.60250	0.870	-94.4	51.4	58.5	31.7	-13.9	184.30932	24-	25												
26	-13.492	-39.220	1747.14917	30.4	-0.6	-75.1	1.5	81.49434	0.949	-90.2	49.9	58.4	21.2	-11.0	166.86917	25-	26												
27	-7.983	-39.718	1709.39365	55.4	0.5	-79.0	0.2	79.42025	0.997	-85.9	48.9	58.5	12.8	-10.1	166.86917	26-	27												
28	-3.441	-39.290	1702.29578	100.8	1.3	-82.7	87.2	77.00874	0.984	-82.2	48.4	58.9	10.5	-10.5	137.58517	27-	28												

TAB NO 44										ATLAS PHOTO NO 44										POD SEQUENCE NO 94									
JULY 31, 1964 13 HR 12 MIN 32 SEC 717 MS																													
TRAJECTORY DATA										SEC TO IMPACT 796.083										ALT 1677.86654									
PHOTO DATA										LAT -4.157										LUN -34.064									
										R 3413.342										V 2.015									
										PTH -73.467										AZ 116.810									
PT LAT LON RANGE AZS/C AZN AZSUN AZEA A* B/A ALZPHA INCD PHAZ EMIS ALPHA SCALE PT-P																													
1	-11.796	-18.149	1834.05972	-14.3	6.9	-77.9	69.1	83.89934	0.898	-93.3	70.0	38.7	34.0	30.4	0.	0-	1												
2	-15.026	-28.041	1737.96301	-30.6	5.7	-79.7	59.4	82.59550	0.931	-90.2	60.5	47.6	21.3	11.2	294.96552	1-	2												
3	-7.744	-33.861	1684.81091	-0.8	2.4	-80.3	66.4	79.27285	0.999	-85.6	54.2	53.2	7.3	0.6	235.88035	2-	3												
4	-7.471	-28.527	1699.93759	-55.5	4.3	-81.3	49.5	80.41162	0.979	-85.2	59.4	47.8	13.0	11.3	160.35776	3-	4												
5	-7.182	-22.895	1747.52722	-70.9	6.0	-82.0	37.1	82.25167	0.929	-84.7	64.9	42.4	23.0	22.4	169.41984	4-	5												
6	-12.862	-22.122	1789.15251	-49.7	8.6	-81.5	47.4	84.82953	0.880	-90.2	66.2	42.2	28.9	22.7	173.58326	5-	6												
7	-14.164	-20.936	1873.77538	-36.5	12.2	-81.8	55.2	88.24430	0.796	-95.7	68.2	42.5	38.0	21.6	193.96723	6-	7												
8	-19.160	-27.352	1815.39787	-20.4	7.6	-78.7	66.1	85.87268	0.852	-95.2	62.3	47.9	32.0	9.4	183.54010	7-	8												
9	-19.287	-33.344	1746.34285	-0.2	3.0	-75.6	78.6	84.54710	0.816	-94.8	56.8	53.3	29.8	-2.3	171.41953	8-	9												
10	-13.234	-33.622	1721.62755	-0.3	2.6	-77.6	74.1	81.43279	0.954	-90.2	55.2	53.0	18.2	0.0	183.51819	9-	10												
11	-7.744	-33.861	1684.81091	-0.8	2.4	-80.3	66.4	79.27285	0.999	-85.6	54.2	53.2	7.3	0.6	166.43119	10-	11												
12	-3.493	-39.174	1692.03683	100.6	1.3	-82.7	86.4	76.51516	0.984	-82.2	48.5	58.9	10.4	-10.4	205.47801	11-	12												
13	-3.214	-34.052	1708.36664	-177.0	2.4	-83.0	56.4	76.66420	0.981	-81.6	53.6	53.7	1.9	-0.1	155.11056	12-	13												
14	-2.887	-28.840	1793.28584	-100.4	3.3	-83.1	36.7	79.18299	0.998	-80.9	58.7	48.4	10.9	10.1	157.35803	13-	14												
15	-2.500	-23.145	1739.60219	-95.2	4.2	-82.9	25.2	80.93258	0.949	-80.0	64.2	43.1	21.6	21.0	166.67051	14-	15												
16	-2.026	-17.294	1823.64149	-93.5	4.8	-82.4	17.7	83.64445	0.868	-79.0	70.2	38.0	32.2	32.1	183.64367	15-	16												
17	-6.883	-16.672	1834.35338	-77.0	7.6	-82.5	28.1	85.11755	0.847	-84.2	71.1	37.2	34.1	33.9	147.51622	16-	17												
18	-12.748	-15.516	1883.31102	-60.5	11.4	-83.3	38.0	87.83456	0.799	-80.0	72.6	36.8	38.8	34.8	181.57668	17-	18												
19	-19.343	-13.617	1982.78885	-48.0	16.8	-85.4	36.0	92.11158	0.699	-96.3	75.1	37.2	46.8	34.8	207.25278	18-	19												
20	-27.434	-10.155	2175.22339	-38.9	23.7	-86.0	52.4	99.22538	0.546	-102.2	79.2	38.2	58.2	34.9	263.24156	19-	20												
21	-26.678	-18.963	2020.74162	-28.1	24.4	-83.7	61.2	93.90181	0.664	-101.1	71.3	43.3	49.5	18.9	238.64956	20-	21												
22	-25.383	-26.287	2043.55111	-19.2	11.1	-79.0	71.0	90.85833	0.730	-100.1	64.9	48.6	44.2	5.3	198.81688	21-	22												
23	-26.384	-32.989	1922.89865	-0.2	3.6	-74.8	81.9	89.23191	0.757	-99.3	59.1	53.8	42.2	-7.3	181.81223	22-	23												
24	-26.634	-39.534	1939.96487	14.9	-4.0	-70.2	3.5	88.75452	0.750	-98.7	53.7	59.0	43.6	-19.4	177.53980	23-	24												
25	-19.531	-39.219	1812.26517	20.0	-1.9	-72.1	2.3	84.09529	0.870	-94.4	51.5	58.5	31.6	-13.8	215.34711	24-	25												
26	-13.485	-39.102	1736.76659	30.2	-0.5	-75.2	1.1	81.01005	0.949	-90.2	50.1	58.4	21.1	-10.9	183.11716	25-	26												
27	-8.008	-39.103	1699.19878	55.0	0.5	-79.0	89.7	78.94670	0.997	-85.9	49.9	58.5	12.8	-10.0	165.88346	26-	27												
28	-3.493	-39.174	1692.03683	100.6	1.3	-82.7	86.4	76.51516	0.984	-82.2	48.5	58.9	10.4	-10.4	136.76538	27-	28												

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JULY 31, 1964 13 HR 12 MIN 37 SEC 837 MS

TAB NO 45

ATLAS PHOTO NO 45

POD SEQUENCE NO 96

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				790.963		1667.99094	-4.179	-34.019	3403.446	2.017	-73.433	116.804				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.786	-18.168	1823.38963	-14.5	6.9	-77.9	69.0	83.41557	0.898	-93.3	70.0	38.7	34.0	30.4	0.	0-1
2	-13.023	-27.988	1728.05472	-30.8	5.7	-79.7	59.2	82.12462	0.931	-90.2	60.6	47.6	21.4	11.3	292.90199	1-2
3	-7.771	-33.777	1674.96248	-1.4	2.5	-80.3	66.2	76.81581	0.999	-85.6	54.2	53.2	7.3	0.7	234.57243	2-3
4	-7.499	-28.473	1690.18301	-55.5	4.3	-81.3	49.5	79.95034	0.979	-85.2	59.4	47.8	13.1	11.4	159.44558	3-4
5	-7.211	-22.871	1737.60680	-70.9	6.0	-82.0	37.1	81.78455	0.929	-84.7	66.9	42.4	23.0	22.4	168.48188	4-5
6	-12.860	-22.102	1779.06459	-49.7	8.6	-81.5	47.4	84.14837	0.880	-90.2	66.3	42.2	28.9	22.7	172.61670	5-6
7	-19.125	-20.923	1863.15504	-36.6	12.2	-81.8	55.1	87.74419	0.796	-95.7	68.2	42.5	37.9	21.6	192.84612	6-7
8	-19.121	-27.302	1805.00397	-20.5	7.7	-78.8	66.0	85.38095	0.852	-95.2	62.3	47.9	32.0	9.4	182.52741	7-8
9	-19.245	-33.259	1785.84486	-0.4	3.0	-75.7	78.4	84.05281	0.876	-94.8	56.9	53.3	29.7	-2.2	170.45109	8-9
10	-13.229	-33.537	1711.61900	-0.6	2.6	-77.7	73.9	80.95938	0.954	-90.2	55.3	53.0	18.3	0.1	182.42554	9-10
11	-7.771	-33.777	1674.96248	-1.4	2.5	-80.3	66.2	76.81581	0.999	-85.6	54.2	53.2	7.3	0.7	165.47241	10-11
12	-3.546	-39.059	1681.77631	100.3	1.3	-82.6	85.7	76.02236	0.983	-82.2	48.6	58.9	10.3	-10.3	204.24036	11-12
13	-3.267	-33.968	1668.44087	-174.4	2.4	-83.0	56.2	76.18861	0.980	-81.6	53.6	53.7	1.9	-0.1	154.15669	12-13
14	-2.942	-28.786	1683.44926	-100.0	3.4	-83.1	36.8	78.72279	0.998	-80.9	58.8	48.4	10.9	10.3	157.04829	13-14
15	-2.556	-23.321	1729.59639	-95.1	4.2	-82.9	25.3	80.46664	0.948	-80.0	64.2	43.1	21.6	21.0	165.73376	14-15
16	-2.085	-17.305	1813.15065	-93.4	4.8	-82.3	17.8	83.16308	0.868	-79.0	70.2	38.0	32.9	32.1	182.63530	15-16
17	-6.895	-16.683	1823.94640	-76.9	7.6	-82.5	28.2	84.63431	0.847	-84.2	71.0	37.2	34.1	33.8	146.88245	16-17
18	-12.747	-15.533	1872.68846	-76.9	11.4	-83.3	38.1	87.33913	0.793	-90.2	72.6	36.8	38.8	34.8	180.54523	17-18
19	-19.303	-13.648	1971.49147	-60.5	16.8	-85.4	46.0	91.58696	0.700	-96.3	75.1	37.2	46.8	34.8	206.02302	18-19
20	-27.338	-10.224	2150.30032	-39.0	25.6	-90.3	52.4	98.63291	0.548	-102.2	79.1	38.2	58.1	34.8	261.30875	19-20
21	-24.601	-18.467	2008.95773	-78.4	18.3	-83.8	61.1	93.35417	0.665	-101.1	71.3	43.3	49.4	18.9	237.06009	20-21
22	-26.297	-26.244	1936.13625	-15.3	11.1	-79.1	70.9	91.32569	0.731	-100.1	64.9	48.6	44.1	5.4	177.52249	21-22
23	-26.296	-32.901	1911.38840	-0.3	3.7	-74.8	81.8	88.70325	0.758	-99.3	59.2	53.8	42.2	-7.1	180.76724	22-23
24	-26.540	-39.400	1927.93405	14.8	-3.9	-70.4	3.3	88.20353	0.752	-98.7	53.8	59.0	43.5	-19.2	176.41736	23-24
25	-19.486	-39.096	1801.34531	19.9	-1.8	-72.2	2.1	83.58831	0.871	-94.4	51.6	58.5	31.6	-13.6	213.82739	24-25
26	-13.477	-38.985	1726.38489	29.9	-0.5	-75.2	0.8	80.52579	0.950	-90.2	50.2	58.4	21.1	-10.8	182.03631	25-26
27	-8.033	-38.987	1689.00282	54.5	0.5	-79.0	89.2	78.47311	0.997	-85.9	49.2	58.5	12.7	-9.8	164.89810	26-27
28	-3.546	-39.059	1681.77631	100.3	1.3	-82.6	85.7	76.02236	0.983	-82.2	48.6	58.9	10.3	-10.3	135.94570	27-28

TAB NO 46

ATLAS PHOTO NO 46

POD SEQUENCE NO 98

JULY 31, 1964 13 HR 12 MIN 42 SEC 956 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				785.843		1658.08704	-4.202	-33.975	3393.542	2.019	-73.400	116.799				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.777	-18.186	1812.70903	-14.6	6.9	-78.0	68.8	82.93532	0.898	-93.3	69.9	38.7	34.0	30.4	0.	0-1
2	-13.020	-27.936	1718.13620	-30.9	5.7	-79.7	59.1	81.65325	0.931	-90.2	60.6	47.6	21.4	11.3	290.83817	1-2
3	-7.797	-33.693	1665.10707	-2.0	2.5	-80.3	65.9	76.35854	0.999	-85.6	54.3	53.2	7.4	0.8	233.26295	2-3
4	-7.528	-28.419	1680.41936	-55.5	4.3	-81.3	49.4	79.48843	0.978	-85.2	59.5	47.8	13.1	11.4	158.53266	3-4
5	-7.241	-22.848	1727.67581	-70.8	6.0	-82.0	37.2	81.31694	0.929	-84.7	65.0	42.4	23.0	22.4	167.54276	4-5
6	-12.858	-22.082	1768.96481	-49.7	8.6	-81.5	47.4	83.67065	0.877	-90.2	66.3	42.2	28.9	22.7	171.64892	5-6
7	-19.086	-20.910	1852.52245	-36.6	12.2	-81.8	55.1	87.24350	0.796	-95.7	68.3	42.5	37.9	21.6	191.72362	6-7
8	-19.082	-27.252	1794.59953	-20.6	7.7	-78.8	65.8	84.88873	0.852	-95.2	62.4	47.9	32.0	9.5	181.51324	7-8
9	-19.204	-33.174	1775.33893	-0.5	3.0	-75.8	78.2	83.55816	0.877	-94.8	56.9	53.3	29.7	-2.1	169.48179	8-9
10	-13.224	-33.453	1701.60246	-0.8	2.7	-77.7	73.7	80.48559	0.954	-90.2	55.4	53.0	18.3	0.2	181.33215	9-10
11	-7.797	-33.693	1665.10707	-2.0	2.5	-80.3	65.9	76.35854	0.999	-85.6	54.3	53.2	7.4	0.8	164.51258	10-11
12	-3.598	-38.943	1671.51328	100.1	1.3	-82.6	85.0	75.53017	0.983	-82.2	48.7	58.9	10.2	-10.2	203.00296	11-12
13	-3.320	-33.884	1658.51157	-171.8	2.4	-82.9	56.1	75.73303	0.980	-81.6	53.7	53.7	1.8	0.0	153.20529	12-13
14	-2.996	-28.731	1673.60509	-99.6	3.4	-83.0	36.8	78.26225	0.998	-80.9	58.8	48.4	10.9	10.4	156.13786	13-14
15	-2.612	-23.297	1719.58170	-94.9	4.2	-82.9	25.5	80.00029	0.948	-80.0	64.3	43.1	21.7	21.0	164.79601	14-15
16	-2.144	-17.316	1802.65036	-93.3	4.9	-82.3	18.0	82.68079	0.868	-79.0	70.2	38.0	32.9	32.1	181.57595	15-16
17	-6.926	-16.695	1813.52808	-76.9	7.6	-82.5	28.3	84.15056	0.847	-84.2	71.0	37.2	34.0	33.8	146.04785	16-17
18	-12.745	-15.551	1862.65310	-60.4	11.4	-83.3	38.1	86.84311	0.793	-90.2	72.6	36.9	38.8	34.8	179.53222	17-18
19	-19.263	-13.680	1960.18146	-48.0	16.8	-85.4	46.0	91.06176	0.701	-96.3	75.0	37.2	46.7	34.8	204.79267	18-19
20	-27.243	-10.294	2137.37207	-39.0	25.5	-90.2	52.3	98.04019	0.550	-102.2	79.1	38.2	58.0	34.7	259.38109	19-20
21	-26.503	-18.971	1997.16437	-28.5	18.3	-83.8	61.0	92.80609	0.666	-100.1	71.3	43.3	49.4	18.9	235.47309	20-21
22	-26.211	-26.200	1924.71288	-15.3	11.1	-79.1	70.8	89.79246	0.732	-100.1	64.9	48.6	44.1	5.4	196.38003	21-22
23	-26.207	-32.814	1899.87306	-0.4	3.7	-74.9	81.6	88.16836	0.759	-99.3	59.2	53.8	42.1	-7.0	179.72148	22-23
24	-26.446	-39.267	1915.90457	14.6	-3.8	-70.5	3.1	87.65260	0.753	-98.7	53.9	59.0	43.4	-19.0	175.27636	23-24
25	-19.442	-38.974	1790.42169	19.7	-1.8	-72.3	1.8	83.08116	0.872	-94.4	51.7	58.5	31.5	-13.5	212.31642	24-25
26	-13.470	-38.867	1715.99852	29.6	-0.5	-75.3	0.4	80.04131	0.950	-90.2	50.3	58.4	21.0	-10.7	180.90096	25-26
27	-8.059	-38.871	1678.80289	54.1	0.5	-79.0	88.7	77.99932	0.998	-85.9	49.3	58.5	12.6	-9.7	163.91214	26-27
28	-3.598	-38.943	1671.51328	100.1	1.3	-82.6	85.0	75.53017	0.983	-82.2	48.7	58.9	10.2	-10.2	135.12571	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 12 MIN 48 SEC 76 MS
 TAB NO 47 ATLAS PHOTO NO 47 POD SEQUENCE NO 100

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				780.723		1648.17462	-4.224	-33.930	3383.630	2.021	-73.366	116.793				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.768	-18.205	1802.01781	-14.8	6.9	-78.0	68.6	82.45486	0.898	-93.3	69.9	38.8	33.9	30.3	0.	0-1
2	-13.016	-27.881	1708.21701	-31.0	5.7	-79.7	59.0	81.18184	0.931	-90.2	60.7	47.6	21.4	11.4	288.72473	1-2
3	-7.824	-33.607	1655.24469	-2.7	2.5	-80.3	65.7	77.90105	0.999	-85.6	54.4	53.2	7.4	0.9	231.95466	2-3
4	-7.555	-28.363	1670.65553	-55.5	4.3	-81.3	49.4	79.02650	0.978	-85.2	59.6	47.8	13.2	11.5	157.62030	3-4
5	-7.270	-22.823	1717.75357	-70.7	6.0	-82.0	37.2	80.84972	0.929	-84.7	65.0	42.5	23.0	22.4	166.60656	4-5
6	-12.855	-22.060	1758.87395	-49.8	8.6	-81.5	47.4	83.19335	0.879	-90.2	66.3	42.2	28.9	22.8	170.68196	5-6
7	-19.047	-20.895	1841.90146	-36.7	12.2	-81.8	55.0	86.74336	0.796	-95.7	68.3	42.5	37.9	21.6	190.60315	6-7
8	-19.042	-27.200	1784.19534	-20.7	7.7	-78.8	65.7	84.39651	0.852	-95.2	62.4	47.9	32.0	9.5	180.25257	7-8
9	-19.163	-33.087	1764.82504	-0.7	3.1	-75.8	78.0	83.06312	0.877	-94.8	57.0	53.3	29.7	-2.0	168.51336	8-9
10	-13.218	-33.367	1691.57797	-1.1	2.7	-77.8	73.4	80.01143	0.954	-90.2	55.5	53.0	18.3	0.3	180.23826	9-10
11	-7.824	-33.607	1655.24469	-2.7	2.5	-80.3	65.7	77.90105	0.999	-85.6	54.4	53.2	7.4	0.9	163.55192	10-11
12	-3.650	-38.826	1661.23941	-168.8	2.4	-82.9	55.9	75.03751	0.983	-82.2	48.8	58.9	10.1	-10.0	201.76504	11-12
13	-3.373	-33.798	1648.57683	-99.2	3.4	-83.0	36.9	75.27748	0.980	-81.6	53.8	53.7	1.8	0.1	152.25308	12-13
14	-3.050	-28.675	1663.76215	-99.2	3.4	-83.0	36.9	77.80174	0.997	-80.9	58.9	48.4	11.0	10.5	155.22812	13-14
15	-2.668	-23.272	1709.57642	-94.7	4.2	-82.8	25.6	79.53437	0.948	-80.0	64.3	43.1	21.7	21.0	163.86124	14-15
16	-2.203	-17.325	1792.17296	-93.2	4.9	-82.3	18.1	82.19951	0.868	-79.0	70.2	38.0	32.8	32.1	180.52386	15-16
17	-6.957	-16.705	1803.13164	-76.8	7.6	-82.5	28.4	83.66779	0.847	-84.2	71.0	37.2	34.0	33.8	145.21512	16-17
18	-12.743	-15.566	1851.44142	-60.4	11.4	-83.3	38.1	86.34819	0.794	-90.2	72.6	36.9	38.8	34.8	178.52201	17-18
19	-19.223	-13.709	1948.90195	-48.0	16.7	-85.4	45.9	90.53798	0.701	-96.3	75.0	37.2	46.7	34.7	203.56762	18-19
20	-27.147	-10.360	2124.49826	-39.0	25.4	-90.2	52.3	97.44998	0.551	-102.2	79.0	38.2	57.9	34.6	257.47351	19-20
21	-26.415	-18.973	1985.39203	-28.5	18.2	-83.8	61.0	92.25898	0.667	-101.1	71.3	43.3	49.3	18.9	233.90902	20-21
22	-26.124	-26.155	1913.29443	-15.4	11.0	-79.2	70.7	89.25945	0.732	-100.1	64.9	48.6	44.0	5.5	195.24547	21-22
23	-26.118	-32.726	1888.35252	-0.5	3.8	-75.0	81.4	87.63320	0.760	-99.3	59.3	53.8	42.0	-6.9	178.67747	22-23
24	-26.352	-39.132	1903.86302	14.5	-3.7	-70.6	2.8	87.10108	0.755	-98.7	54.0	59.0	43.3	-18.9	174.17492	23-24
25	-19.397	-38.849	1779.48364	19.5	-1.7	-72.4	1.5	82.57333	0.872	-94.4	51.8	58.6	31.4	-13.3	210.80601	24-25
26	-13.463	-38.748	1705.59822	29.3	-0.4	-75.4	0.0	79.55618	0.950	-90.2	50.5	58.6	21.0	-10.5	179.76422	25-26
27	-8.084	-38.754	1668.59039	53.7	0.5	-79.0	88.2	77.52696	0.998	-85.9	49.4	58.5	12.6	-9.6	162.92485	26-27
28	-3.650	-38.826	1661.23941	99.9	1.3	-82.5	84.2	75.03751	0.983	-82.2	48.8	58.9	10.1	-10.0	134.30482	27-28

JULY 31, 1964 13 HR 12 MIN 53 SEC 196 MS
 TAB NO 48 ATLAS PHOTO NO 48 POD SEQUENCE NO 102

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				775.603		1638.25366	-4.247	-33.885	3373.709	2.024	-73.332	116.787				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.759	-18.224	1791.31573	-14.9	6.9	-78.1	68.5	81.97397	0.898	-93.3	69.9	38.8	33.9	30.3	0.	0-1
2	-13.012	-27.827	1698.28918	-31.1	5.7	-79.7	58.9	80.71003	0.931	-90.2	60.8	47.6	21.5	11.4	286.60170	1-2
3	-7.850	-33.521	1645.37517	-3.3	2.5	-80.3	65.4	77.44335	0.999	-85.6	54.5	53.2	7.4	0.9	230.64528	2-3
4	-7.583	-28.307	1660.88411	-55.5	4.3	-81.3	49.3	78.56423	0.978	-85.2	59.6	47.8	13.2	11.6	156.70745	3-4
5	-7.300	-22.798	1707.82413	-70.7	6.1	-82.0	37.2	80.38217	0.928	-84.7	65.0	42.5	23.1	22.5	165.66987	4-5
6	-12.853	-22.038	1748.77490	-49.8	8.6	-81.5	47.3	82.71567	0.879	-90.2	66.3	42.2	28.9	22.8	169.71407	5-6
7	-19.008	-20.880	1831.27242	-36.7	12.2	-81.8	55.0	86.24284	0.796	-95.7	68.3	42.5	37.9	21.7	189.48234	6-7
8	-19.003	-27.148	1773.78244	-20.8	7.7	-78.9	65.6	83.90388	0.852	-95.2	62.4	47.9	32.0	9.6	179.49287	7-8
9	-19.121	-32.999	1754.30313	-0.9	3.1	-75.9	77.8	82.56771	0.877	-94.8	57.1	53.3	29.6	-1.9	167.54435	8-9
10	-13.213	-33.281	1681.54539	-1.4	2.7	-77.8	73.2	79.53688	0.954	-90.2	55.5	53.0	18.3	0.4	179.14356	9-10
11	-7.850	-33.521	1645.37517	-3.3	2.5	-80.3	65.4	77.44335	0.999	-85.6	54.5	53.2	7.4	0.9	162.59054	10-11
12	-3.702	-38.709	1650.96141	99.6	1.3	-82.5	83.5	74.54528	0.982	-82.2	49.0	58.9	9.9	-9.9	200.52728	11-12
13	-3.426	-33.711	1638.63641	-165.7	2.4	-82.9	55.7	74.82194	0.980	-81.6	53.9	53.7	1.7	0.2	151.30105	12-13
14	-3.105	-28.618	1653.91304	-98.9	3.4	-83.0	37.0	77.34094	0.997	-80.9	59.0	48.4	11.0	10.5	154.31797	13-14
15	-2.724	-23.246	1699.56650	-94.6	4.3	-82.8	25.8	79.06819	0.948	-80.0	64.3	43.1	21.7	21.1	162.92616	14-15
16	-2.261	-17.333	1781.69180	-93.1	4.9	-82.3	18.3	81.71806	0.868	-79.0	70.2	38.0	32.8	32.1	179.47230	15-16
17	-6.988	-16.714	1792.72975	-76.8	7.7	-82.5	28.4	83.18478	0.847	-84.2	71.0	37.2	34.0	33.8	144.38192	16-17
18	-12.741	-15.581	1840.82339	-60.4	11.4	-83.3	38.1	85.85297	0.794	-90.2	72.6	36.9	38.8	34.7	177.51108	17-18
19	-19.182	-13.738	1937.61739	-48.0	16.7	-85.3	45.9	90.01397	0.702	-96.3	75.0	37.2	46.7	34.7	202.34287	18-19
20	-27.052	-10.425	2111.62933	-39.1	25.3	-90.1	52.3	96.86000	0.553	-102.2	78.9	38.2	57.7	34.5	255.57328	19-20
21	-26.327	-18.974	1973.61534	-28.6	18.1	-83.8	60.9	91.71166	0.668	-101.1	71.3	43.3	49.2	18.9	232.35077	20-21
22	-26.038	-26.109	1901.86987	-15.5	11.0	-79.2	70.6	88.72614	0.733	-100.1	65.0	48.6	43.9	5.6	194.11075	21-22
23	-26.030	-32.636	1876.82683	-0.6	3.8	-75.1	81.2	87.09780	0.761	-99.3	59.3	53.8	41.9	-6.8	177.63315	22-23
24	-26.257	-38.996	1891.82034	14.4	-3.6	-70.7	2.6	86.54951	0.756	-98.7	54.0	59.0	43.1	-18.7	173.05461	23-24
25	-19.352	-38.725	1768.53978	19.3	-1.6	-72.5	1.2	82.06523	0.873	-94.4	51.9	58.6	31.3	-13.2	209.29858	24-25
26	-13.455	-38.628	1695.13144	29.0	-0.4	-75.4	89.7	79.07076	0.951	-90.2	50.5	58.4	20.9	-10.4	178.62729	25-26
27	-8.109	-38.637	1658.37224	53.2	0.6	-79.0	87.7	77.05034	0.998	-85.9	49.5	58.5	12.5	-9.5	161.93686	26-27
28	-3.702	-38.709	1650.96141	99.6	1.3	-82.5	83.5	74.54528	0.982	-82.2	49.0	58.9	9.9	-9.9	133.48342	27-28

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JULY 31, 1964 13 HR 12 MIN 58 SEC 316 MS

TAB NO 49

ATLAS PHOTO NO 49

POD SEQUENCE NO 104

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				770.483		1628.32413	-4.270	-33.840	3363.779	2.026	-73.298	116.781				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.750	-18.243	1780.60291	-15.1	6.9	-78.1	68.3	81.49257	0.898	-93.3	69.9	38.8	33.9	30.3	0.	0-1
2	-13.008	-27.772	1688.35077	-31.2	5.7	-79.8	58.8	80.23772	0.930	-90.2	60.8	47.6	21.5	11.5	284.47910	1-2
3	-7.877	-33.435	1635.49850	-3.9	2.5	-80.3	65.2	76.98540	1.000	-85.6	54.6	53.2	7.5	1.0	229.33429	2-3
4	-7.611	-28.251	1651.10326	-55.5	4.4	-81.3	49.2	78.10150	0.978	-85.2	59.7	47.8	13.3	11.6	155.79380	3-4
5	-7.329	-22.773	1697.88356	-70.6	6.1	-82.0	37.3	79.91410	0.928	-84.7	65.1	42.5	23.1	22.5	164.73187	4-5
6	-12.850	-22.016	1738.66341	-49.8	8.6	-81.5	47.3	82.23739	0.879	-90.2	66.3	42.2	29.0	22.8	168.74476	5-6
7	-18.969	-20.865	1820.63043	-36.8	12.2	-81.9	54.9	85.74171	0.797	-95.7	68.3	42.5	37.9	21.7	188.36012	6-7
8	-18.963	-27.096	1763.35858	-20.9	7.7	-78.9	65.4	83.41073	0.852	-95.2	62.5	47.9	31.9	9.7	178.48083	7-8
9	-19.079	-32.912	1743.77312	-1.0	3.1	-76.0	77.6	82.07191	0.877	-94.8	57.1	53.3	29.6	-1.8	166.57445	8-9
10	-13.207	-33.195	1671.50467	-1.6	2.7	-77.8	72.9	79.06195	0.954	-90.2	55.6	53.0	18.3	0.5	178.04833	9-10
11	-7.877	-33.435	1635.49850	-3.9	2.5	-80.3	65.2	76.98540	1.000	-85.6	54.6	53.2	7.5	1.0	161.62811	10-11
12	-3.755	-38.591	1640.68095	99.4	1.3	-82.5	82.8	74.05368	0.982	-82.2	49.1	58.9	9.8	-9.8	199.28972	11-12
13	-3.479	-33.625	1628.69029	-162.5	2.4	-82.8	55.5	74.36640	0.980	-81.6	54.0	53.7	1.7	0.3	150.34933	12-13
14	-3.159	-28.562	1644.05603	-98.5	3.4	-82.9	37.0	76.87978	0.997	-80.9	59.0	48.4	11.1	10.6	153.40725	13-14
15	-2.780	-23.220	1689.54662	-94.4	4.3	-82.8	25.9	78.60157	0.948	-80.0	64.3	43.1	21.7	21.1	161.98997	14-15
16	-2.320	-17.342	1771.20044	-93.0	5.0	-82.2	18.5	81.23614	0.869	-79.0	70.2	38.0	32.8	32.1	178.41959	15-16
17	-7.019	-16.724	1782.31564	-76.7	7.7	-82.5	28.5	82.70120	0.847	-84.2	71.0	37.2	34.0	33.8	143.54789	16-17
18	-12.739	-15.596	1830.19174	-60.4	11.4	-83.3	38.1	85.35712	0.794	-90.3	72.6	36.9	38.8	34.7	176.49858	17-18
19	-19.142	-13.767	1926.31905	-48.0	16.6	-85.3	45.9	89.48931	0.702	-96.3	75.0	37.2	46.6	34.7	201.11698	18-19
20	-26.957	-10.490	2098.75320	-39.1	25.2	-90.1	52.2	96.26967	0.554	-102.2	78.9	38.2	57.6	34.5	253.67763	19-20
21	-26.239	-18.975	1961.82814	-28.6	18.1	-83.8	60.8	91.16386	0.669	-101.1	71.2	43.3	49.1	19.0	230.79399	20-21
22	-25.951	-26.063	1890.43633	-15.0	11.0	-77.5	70.7	88.47272	0.733	-100.4	65.0	40.0	33.7	5.7	172.77407	21-22
23	-25.941	-32.547	1865.29587	-0.8	3.9	-75.2	81.1	86.56215	0.762	-99.3	59.4	53.8	41.8	-6.6	176.58803	22-23
24	-26.163	-38.861	1879.77890	14.2	-3.5	-70.9	2.4	85.99799	0.757	-98.7	54.1	59.0	43.0	-18.5	171.93571	23-24
25	-19.307	-38.600	1757.59216	19.1	-1.6	-72.6	0.9	81.55696	0.874	-94.4	52.0	58.6	31.3	-13.1	207.79439	24-25
26	-13.447	-38.509	1684.78004	28.8	-0.4	-75.5	89.3	78.58511	0.951	-90.2	50.6	58.4	20.9	-10.3	177.49047	25-26
27	-8.134	-38.519	1648.15013	52.8	0.6	-79.0	87.2	76.57554	0.998	-85.9	49.6	58.5	12.4	-9.4	160.94807	26-27
28	-3.755	-38.591	1640.68095	99.4	1.3	-82.5	82.8	74.05368	0.982	-82.2	49.1	58.9	9.8	-9.8	132.66191	27-28

JULY 31, 1964 13 HR 13 MIN 3 SEC 436 MS

TAB NO 50

ATLAS PHOTO NO 50

POD SEQUENCE NO 106

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				765.363		1618.38580	-4.293	-33.794	3353.841	2.028	-73.264	116.775				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.740	-18.261	1769.87903	-15.2	6.8	-78.1	68.1	81.01052	0.898	-93.3	69.9	38.8	33.8	30.2	0.	0-1
2	-13.005	-27.718	1678.39619	-31.3	5.7	-79.8	58.7	79.76463	0.930	-90.2	60.9	47.6	21.5	11.5	282.38344	1-2
3	-7.903	-33.350	1625.61409	-4.5	2.5	-80.3	64.9	76.52717	1.000	-85.6	54.7	53.2	7.5	1.1	228.01998	2-3
4	-7.639	-28.196	1641.30774	-55.5	4.4	-81.3	49.2	77.63808	0.977	-85.2	59.7	47.8	13.4	11.7	154.87864	3-4
5	-7.358	-22.749	1687.92116	-70.5	6.1	-82.0	37.3	79.44500	0.928	-84.7	65.1	42.5	23.1	22.5	163.79028	4-5
6	-12.847	-21.995	1728.52792	-49.8	8.6	-81.5	47.3	81.75799	0.879	-90.2	66.4	42.2	29.0	22.8	167.77300	5-6
7	-18.930	-20.851	1809.96222	-36.8	12.2	-81.9	54.8	85.23935	0.797	-95.7	68.3	42.5	37.9	21.7	187.23478	6-7
8	-18.923	-27.045	1752.91751	-21.1	7.7	-79.0	65.3	82.91677	0.853	-95.2	62.5	47.9	31.9	9.7	177.66406	7-8
9	-19.038	-32.826	1733.23451	-1.2	3.1	-76.0	77.4	81.57572	0.878	-94.8	57.2	53.3	29.6	-1.7	165.60257	8-9
10	-13.202	-33.109	1661.45525	-1.9	2.8	-77.9	72.7	78.58661	0.954	-90.2	55.7	53.0	18.3	0.6	176.95238	9-10
11	-7.903	-33.350	1625.61409	-4.5	2.5	-80.3	64.9	76.52717	1.000	-85.6	54.7	53.2	7.5	1.1	160.66460	10-11
12	-3.807	-38.474	1630.40192	99.1	1.3	-82.4	82.1	73.56326	0.981	-82.2	49.2	58.9	9.7	-9.7	198.05281	11-12
13	-3.532	-33.539	1618.73787	-159.2	2.4	-82.8	55.3	73.91081	0.980	-81.6	54.1	53.7	1.7	0.4	149.39847	12-13
14	-3.213	-28.506	1634.18591	-98.2	3.4	-82.9	37.1	76.41801	0.997	-80.9	59.1	48.4	11.1	10.6	152.49512	13-14
15	-2.836	-23.195	1679.50674	-94.2	4.3	-82.7	26.1	78.13405	0.948	-80.1	64.4	43.1	21.7	21.1	161.05042	14-15
16	-2.378	-17.351	1760.68115	-92.8	5.0	-82.2	18.6	80.75299	0.869	-79.0	70.2	38.0	32.8	32.1	177.31133	15-16
17	-7.050	-16.735	1771.87120	-76.6	7.7	-82.4	28.6	82.21624	0.847	-84.2	71.0	37.2	34.0	33.8	142.71157	16-17
18	-12.737	-15.613	1819.52660	-60.4	11.4	-83.3	38.2	86.85971	0.794	-90.3	72.5	36.9	38.7	34.7	175.48231	17-18
19	-19.101	-13.797	1914.98349	-48.1	16.6	-85.3	45.9	88.96292	0.703	-96.3	74.9	37.2	46.6	34.6	199.88652	18-19
20	-26.861	-10.557	2085.83768	-39.1	25.1	-90.0	52.2	95.67752	0.556	-102.2	78.8	38.2	57.5	34.4	251.77855	19-20
21	-26.151	-18.978	1950.01358	-28.7	18.0	-83.8	60.7	90.61479	0.670	-101.1	71.2	43.3	49.1	19.0	229.22785	20-21
22	-25.865	-26.018	1878.98619	-15.7	11.0	-79.3	70.3	85.65794	0.735	-100.1	65.0	48.6	43.8	-6.5	191.83280	21-22
23	-25.852	-32.459	1853.75919	-0.9	3.9	-75.3	80.9	86.02628	0.763	-99.3	59.4	53.8	41.8	-6.5	175.54067	22-23
24	-26.068	-38.728	1867.74519	14.1	-3.4	-71.0	2.1	85.44687	0.759	-98.7	54.2	59.0	42.9	-18.3	170.81903	23-24
25	-19.261	-38.477	1746.64590	18.9	-1.5	-72.7	0.6	81.04876	0.875	-94.4	52.1	58.6	31.2	-12.9	206.29664	24-25
26	-13.440	-38.390	1674.36841	28.5	-0.3	-75.5	88.9	78.09946	0.952	-90.2	50.7	58.4	20.8	-10.2	176.35432	25-26
27	-8.159	-38.402	1637.92812	52.3	0.6	-79.0	86.7	76.10073	0.999	-85.9	49.8	58.5	12.3	-9.3	159.95950	26-27
28	-3.807	-38.474	1630.40192	99.1	1.3	-82.4	82.1	73.56326	0.981	-82.2	49.2	58.9	9.7	-9.7	131.84041	27-28

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JULY 31, 1964 13 HR 13 MIN 8 SEC 556 MS TAB NO 51 ATLAS PHOTO NO 51 POD SEQUENCE NO 108

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LUN	R	V	PTH	AZ		
PHOTO DATA				760.243				1608.43878	-4.316	-33.748	3343.894	2.030	-73.230	116.770		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.731	-18.280	1759.14424	-15.4	6.8	-78.2	68.0	80.52794	0.898	-93.3	69.9	38.8	33.8	30.2	0.	0-1
2	-13.001	-27.665	1668.43036	-31.4	5.7	-79.8	58.6	79.29101	0.930	-90.2	60.9	47.6	21.6	11.6	280.29074	1-2
3	-7.929	-33.265	1615.72226	-5.1	2.5	-80.3	64.7	76.06867	1.000	-85.6	54.8	53.2	7.6	1.2	226.70396	2-3
4	-7.666	-28.141	1631.50212	-55.5	4.4	-81.3	49.1	77.17418	0.977	-85.2	59.8	47.8	13.4	11.7	153.96264	3-4
5	-7.387	-22.725	1677.94650	-70.5	6.1	-82.0	37.4	78.97533	0.928	-84.7	65.1	42.5	23.2	22.5	162.84714	4-5
6	-12.844	-21.974	1718.37875	-49.8	8.6	-81.5	47.2	81.27793	0.879	-90.2	66.4	42.2	29.0	22.8	166.79960	5-6
7	-18.891	-20.837	1799.27969	-36.9	12.2	-81.9	54.8	84.73631	0.797	-95.7	68.3	42.5	37.8	21.7	186.10799	6-7
8	-18.883	-26.995	1742.46474	-21.2	7.7	-79.0	65.2	82.42226	0.853	-95.2	62.6	47.9	31.9	9.8	176.44535	7-8
9	-18.996	-32.740	1722.68757	1.4	3.2	-76.1	77.2	81.07914	0.878	-94.8	57.3	53.3	29.5	-1.7	164.62970	8-9
10	-13.196	-33.024	1651.39746	-2.2	2.8	-77.9	72.5	78.11087	0.954	-90.2	55.8	53.1	18.3	0.6	175.85576	9-10
11	-7.929	-33.265	1615.72226	-5.1	2.5	-80.3	64.7	76.06867	1.000	-85.6	54.8	53.2	7.6	1.2	159.70045	10-11
12	-3.589	-33.454	1620.12053	98.9	1.3	-82.4	81.4	73.07348	0.981	-82.2	49.3	58.9	9.6	-9.6	196.61602	11-12
13	-3.267	-28.451	1624.30724	-97.8	3.4	-82.9	37.2	73.45519	0.980	-81.6	54.2	53.7	1.6	0.5	148.44790	12-13
14	-2.892	-23.170	1669.45630	-94.0	4.3	-82.7	26.2	75.95585	0.997	-80.9	59.1	48.4	11.1	10.7	151.58229	13-14
15	-2.437	-17.361	1750.14987	-92.7	5.0	-82.2	18.8	80.26929	0.869	-79.0	70.2	38.0	32.8	32.0	176.30151	14-15
16	-7.081	-16.746	1761.41278	-76.6	7.7	-82.4	28.7	81.73063	0.847	-84.2	71.0	37.2	34.0	33.8	141.87409	15-16
17	-12.735	-15.629	1808.84586	-60.4	11.4	-83.3	38.2	84.36158	0.794	-90.3	72.5	36.9	38.7	34.7	174.46433	16-17
18	-19.060	-13.828	1903.63190	-48.1	16.6	-85.3	45.9	88.43578	0.703	-96.3	74.9	37.2	46.5	34.6	198.65454	17-18
19	-26.766	-10.623	2072.91196	-39.2	25.0	-90.0	52.2	95.08490	0.558	-102.2	78.7	38.2	57.4	34.3	249.88327	18-19
20	-26.063	-18.981	1938.18668	-28.8	18.0	-83.8	60.6	90.06514	0.671	-101.1	71.2	43.3	49.0	19.0	227.66245	19-20
21	-25.778	-25.974	1867.52620	-15.8	11.0	-79.4	70.2	87.12300	0.736	-100.1	65.0	48.6	43.8	5.8	190.68900	20-21
22	-25.763	-32.372	1842.21689	-1.0	3.9	-75.3	80.7	85.49014	0.764	-99.3	59.5	53.8	41.7	-6.4	174.49233	21-22
23	-25.974	-38.595	1855.71283	13.9	-3.3	-71.1	1.9	84.89582	0.760	-98.7	54.3	59.0	42.8	-18.2	169.70367	22-23
24	-19.216	-38.353	1735.69603	18.7	-1.5	-72.8	0.3	80.54041	0.875	-94.4	52.2	58.6	31.1	-12.8	204.79809	23-24
25	-13.432	-38.271	1663.95230	28.2	-0.3	-75.6	88.6	77.61360	0.952	-90.2	50.8	58.4	20.7	-10.1	175.21819	24-25
26	-8.184	-38.286	1627.70230	51.9	0.6	-79.0	86.2	75.62574	0.999	-85.9	49.9	58.5	12.3	-9.2	158.97034	25-26
27	-3.859	-38.358	1620.12053	98.9	1.3	-82.4	81.4	73.07348	0.981	-82.2	49.3	58.9	9.6	-9.6	131.01870	26-27

JULY 31, 1964 13 HR 13 MIN 13 SEC 676 MS TAB NO 52 ATLAS PHOTO NO 52 POD SEQUENCE NO 110

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
				755.124	1598.48325	-4.339	-33.702	3333.939	2.032	-73.195	116.764					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.722	-18.299	1748.39868	-15.5	6.8	-78.2	67.8	80.04486	0.898	-93.3	69.8	38.8	33.7	30.2	0.	0-1
2	-12.996	-27.611	1658.45387	-31.6	5.8	-79.8	58.4	78.81689	0.930	-90.2	61.0	47.6	21.6	11.6	278.19827	1-2
3	-7.955	-33.179	1605.82310	-5.7	2.6	-80.3	64.5	75.60991	1.000	-85.6	54.9	53.2	7.6	1.3	225.38625	2-3
4	-7.694	-28.086	1621.68703	-55.5	4.4	-81.3	49.1	76.70984	0.977	-85.2	59.8	47.8	13.5	11.8	153.04581	3-4
5	-7.416	-22.701	1667.96069	-70.4	6.1	-81.9	37.4	78.50515	0.927	-84.7	65.1	42.5	23.2	22.6	161.90268	4-5
6	-12.841	-21.954	1708.21719	-49.9	8.6	-81.5	47.2	80.79729	0.879	-90.2	66.4	42.2	29.0	22.9	165.82498	5-6
7	-18.851	-20.824	1788.58427	-36.9	12.1	-81.9	54.7	84.23266	0.797	-95.7	68.3	42.5	37.8	21.7	184.97990	6-7
8	-18.843	-26.944	1732.00098	-21.3	7.7	-79.0	65.1	81.92723	0.853	-95.2	62.6	47.9	31.9	9.8	175.42503	7-8
9	-18.954	-32.654	1712.13246	-1.5	3.2	-76.2	77.0	80.58218	0.878	-94.8	57.4	53.3	29.5	-1.6	163.05584	8-9
10	-13.191	-32.939	1641.33141	-2.4	2.8	-77.9	72.3	77.63474	0.954	-90.2	55.9	53.1	18.3	0.7	174.75842	9-10
11	-7.955	-33.179	1605.82310	-5.7	2.6	-80.3	64.5	75.60991	1.000	-85.6	54.9	53.2	7.6	1.3	158.73526	10-11
12	-3.911	-38.241	1609.83644	98.6	1.3	-82.3	80.8	72.58429	0.981	-82.2	49.4	58.9	9.5	-9.4	195.57944	11-12
13	-3.638	-33.368	1598.81525	-152.2	2.4	-82.7	55.0	72.99954	0.980	-81.6	54.3	53.7	1.6	0.6	147.49768	12-13
14	-3.321	-28.395	1614.42056	-97.4	3.5	-82.8	37.2	75.49331	0.997	-80.9	59.2	48.4	11.2	10.8	150.66879	13-14
15	-2.948	-23.146	1659.39636	-93.9	4.4	-82.7	26.3	77.19759	0.948	-80.1	64.4	43.1	21.7	21.2	159.16747	14-15
16	-2.496	-17.371	1739.60847	-92.6	5.1	-82.2	18.9	79.78513	0.869	-79.0	70.2	38.0	32.8	32.0	175.24063	15-16
17	-7.111	-16.757	1750.94226	-76.5	7.7	-82.4	28.8	81.24447	0.848	-84.2	71.0	37.2	34.0	33.8	141.03567	16-17
18	-12.732	-15.646	1798.15166	-60.4	11.4	-83.3	38.2	83.86281	0.794	-90.3	72.5	36.9	38.7	34.7	175.44496	17-18
19	-19.019	-13.858	1892.26685	-48.1	16.5	-85.3	45.9	87.90802	0.704	-96.3	74.9	37.2	46.5	34.6	197.42155	18-19
20	-26.670	-10.690	2059.97958	-39.2	24.8	-89.9	52.1	94.49197	0.559	-102.2	78.6	38.2	57.3	34.2	247.99250	19-20
21	-25.975	-18.983	1926.34952	-28.8	17.9	-83.9	60.6	89.51501	0.672	-101.1	71.2	43.3	48.9	19.0	226.09874	20-21
22	-25.674	-25.930	1856.05730	-15.9	11.0	-79.4	70.0	86.58766	0.736	-100.1	65.0	48.6	43.7	5.9	189.54397	21-22
23	-25.674	-32.284	1830.66931	-1.1	4.0	-75.4	80.5	84.95378	0.765	-99.3	59.5	53.9	41.6	-6.3	173.44316	22-23
24	-25.860	-38.461	1843.68153	13.8	-3.2	-71.2	1.7	84.34483	0.762	-98.7	54.3	59.0	42.7	-18.0	168.58962	23-24
25	-19.171	-38.230	1724.74223	18.6	-1.4	-73.0	0.1	80.03187	0.876	-94.4	52.3	58.6	31.1	-12.7	203.30465	24-25
26	-13.424	-38.153	1653.53137	27.9	-0.3	-75.7	88.2	77.12751	0.952	-90.2	50.9	58.4	20.7	-9.9	174.08215	25-26
27	-8.208	-38.169	1617.47232	51.4	0.6	-79.0	85.7	75.15056	0.999	-85.9	50.0	58.5	12.2	-9.0	157.98068	26-27
28	-3.911	-38.241	1609.83644	98.6	1.3	-82.3	80.8	72.58429	0.981	-82.2	49.4	58.9	9.5	-9.4	130.19669	27-28

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TAB NO 53

ATLAS PHOTO NO 53

POD SEQUENCE NO 112

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				750.004		1588.51865	-4.362	-33.656	3323.974	2.034	-73.160	116.758				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.713	-18.318	1737.64177	-15.7	6.8	-78.3	67.7	79.56108	0.898	-93.3	69.8	38.8	33.7	30.1	0.	0-
2	-12.992	-27.559	1648.46065	-31.7	5.8	-79.8	58.3	78.34196	0.930	-90.2	61.0	47.6	21.6	11.7	276.13353	1- 2
3	-7.981	-33.095	1595.91579	-6.3	2.6	-80.3	64.2	75.15081	1.000	-85.6	54.9	53.2	7.6	1.4	224.06515	2- 3
4	-7.721	-28.032	1611.85666	-55.5	4.4	-81.2	49.0	76.24478	0.977	-85.2	59.9	47.8	13.5	11.8	152.12741	3- 4
5	-7.445	-22.678	1657.95238	-70.3	6.1	-81.9	37.4	78.03390	0.927	-84.8	65.2	42.5	23.2	22.6	160.95447	4- 5
6	-12.838	-21.934	1698.03098	-49.9	8.6	-81.5	47.2	80.31548	0.878	-90.2	66.4	42.2	29.0	22.9	164.84760	5- 6
7	-18.811	-20.811	1777.86189	-37.0	12.1	-81.9	54.6	83.72773	0.797	-95.7	68.3	42.5	37.8	21.7	183.84858	6- 7
8	-18.803	-26.894	1721.51936	-21.4	7.7	-79.1	64.9	81.43136	0.853	-95.2	62.6	47.9	31.9	9.9	174.39985	7- 8
9	-18.912	-32.569	1701.56821	-1.7	3.2	-76.2	76.8	80.08480	0.878	-94.8	57.4	53.3	29.5	-1.5	162.67996	8- 9
10	-13.185	-32.854	1631.25621	-2.7	2.8	-78.0	72.0	77.15818	0.954	-90.2	56.0	53.1	18.3	0.8	173.66033	9-10
11	-7.981	-33.095	1595.91579	-6.3	2.6	-80.3	64.2	75.15081	1.000	-85.6	54.9	53.2	7.6	1.4	157.76907	10-11
12	-3.663	-38.125	1599.55333	98.3	1.3	-82.3	80.1	72.09621	0.980	-82.2	49.6	58.9	9.3	-9.3	194.34828	11-12
13	-3.690	-33.284	1588.84425	-148.7	2.4	-82.7	54.9	72.54379	0.980	-81.6	54.9	53.7	1.6	0.7	146.54816	12-13
14	-3.375	-28.340	1604.52025	-97.1	3.5	-82.8	37.3	75.03014	0.997	-80.9	59.3	48.4	11.2	10.8	149.75384	13-14
15	-3.004	-23.122	1649.31586	-93.7	4.4	-82.6	26.5	76.72820	0.948	-80.1	64.5	43.1	21.8	21.2	158.22200	14-15
16	-2.554	-17.382	1729.03842	-92.5	5.1	-82.1	19.1	79.29970	0.869	-79.0	70.2	38.0	32.7	32.0	174.17606	15-16
17	-7.142	-16.769	1740.44063	-76.4	7.8	-82.4	28.9	80.75688	0.848	-84.2	71.0	37.2	34.0	33.8	140.19494	16-17
18	-12.730	-15.664	1787.42313	-60.3	11.4	-83.3	38.2	83.36245	0.794	-90.3	72.5	36.9	38.7	34.7	172.42163	17-18
19	-18.978	-13.890	1880.86368	-48.1	16.5	-85.3	45.9	87.37847	0.705	-96.3	74.8	37.2	46.4	34.5	196.18380	18-19
20	-26.574	-10.758	2047.00703	-39.2	24.7	-89.9	52.1	93.89718	0.561	-102.2	78.6	38.2	57.2	34.2	246.09851	19-20
21	-25.886	-18.988	1914.48416	-28.9	17.8	-83.9	60.5	88.96358	0.673	-101.1	71.2	43.4	48.9	19.0	224.52571	20-21
22	-25.604	-25.887	1844.51108	-16.0	11.0	-75.5	67.7	82.25151	0.737	-100.1	65.0	48.6	43.6	6.0	188.39296	21-22
23	-25.585	-32.198	1819.11525	-1.2	4.0	-75.5	80.3	84.41713	0.766	-99.3	59.6	53.9	41.5	-6.1	172.39162	22-23
24	-25.785	-38.330	1831.65698	13.7	-3.1	-71.4	1.4	83.79418	0.763	-98.7	54.4	59.0	42.6	-17.8	167.47750	23-24
25	-19.126	-38.108	1713.78923	18.4	-1.4	-73.0	89.8	79.52338	0.877	-94.4	52.4	58.6	31.0	-12.5	201.81538	24-25
26	-13.416	-38.035	1643.10976	27.6	-0.2	-75.7	87.9	76.64140	0.953	-90.2	51.1	58.4	20.6	-9.8	172.94677	25-26
27	-8.233	-38.053	1607.24199	51.0	0.6	-79.1	85.3	74.67535	1.000	-85.9	50.1	58.5	12.1	-8.9	156.99083	26-27
28	-3.963	-38.125	1599.55333	98.3	1.3	-82.3	80.1	72.09621	0.980	-82.2	49.6	58.9	9.3	-9.3	129.37467	27-28

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TAB NO 54

ATLAS PHOTO NO 54

POD SEQUENCE NO 114

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				744.884		1578.54544	-4.386	-33.609	3314.001	2.036	-73.125	116.752				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.703	-18.337	1726.87404	-15.8	6.8	-78.3	67.5	79.07679	0.898	-93.3	69.8	38.9	33.7	30.1	0.	0-
2	-12.988	-27.506	1638.45641	-31.8	5.8	-79.9	58.2	77.86652	0.930	-90.2	61.1	47.6	21.6	11.7	274.06978	1- 2
3	-8.008	-33.011	1586.00090	-6.9	2.6	-80.3	64.0	74.69143	1.000	-85.6	55.0	53.2	7.7	1.4	222.74232	2- 3
4	-7.749	-27.978	1602.01649	-55.5	4.4	-81.2	49.0	75.77925	0.976	-85.2	60.0	47.8	13.6	11.9	151.20812	3- 4
5	-7.474	-22.656	1647.93253	-70.3	6.2	-81.9	37.5	77.56213	0.927	-84.8	65.2	42.5	23.3	22.6	160.00495	4- 5
6	-12.855	-21.914	1687.83183	-49.9	8.6	-81.5	47.2	79.83307	0.878	-90.2	66.4	42.2	29.0	22.9	163.86880	5- 6
7	-18.771	-20.799	1767.12621	-37.0	12.1	-82.0	54.6	83.22219	0.798	-95.7	68.3	42.5	37.8	21.8	182.71615	6- 7
8	-18.762	-26.845	1711.02647	-21.5	7.7	-79.1	64.8	80.93496	0.853	-95.2	62.7	47.9	31.9	9.9	173.37299	7- 8
9	-18.869	-32.484	1690.99591	-1.9	3.3	-76.3	76.6	79.58702	0.879	-94.8	57.5	53.3	29.4	-1.4	161.70306	8- 9
10	-13.179	-32.770	1621.17245	-2.9	2.8	-78.0	71.8	76.68121	0.954	-90.2	56.0	53.1	18.3	0.9	172.56180	9-10
11	-8.008	-33.011	1586.00090	-6.9	2.6	-80.3	64.0	74.69143	1.000	-85.6	55.0	53.2	7.7	1.4	156.80186	10-11
12	-4.014	-38.009	1589.26736	98.1	1.3	-82.3	79.5	71.60869	0.980	-82.2	49.7	58.9	9.2	-9.2	193.10725	11-12
13	-3.743	-33.199	1578.86717	-145.0	2.4	-82.6	54.7	72.08798	0.980	-81.6	54.4	53.7	1.6	0.	145.39887	12-13
14	-3.429	-28.286	1594.61165	-96.7	3.5	-82.8	37.4	74.56659	0.996	-80.9	59.3	48.4	11.3	10.9	148.63816	13-14
15	-3.060	-23.098	1639.22545	-93.5	4.4	-82.6	26.6	76.25836	0.948	-80.1	64.5	43.1	21.8	21.2	157.27537	14-15
16	-2.613	-17.393	1718.45767	-92.4	5.1	-82.1	19.2	78.81379	0.870	-79.0	70.2	38.0	32.7	32.0	173.10626	15-16
17	-7.173	-16.782	1729.92633	-76.4	7.8	-82.4	28.9	80.26871	0.848	-84.2	71.0	37.2	34.0	33.7	139.35317	16-17
18	-12.727	-15.683	1776.68048	-60.3	11.4	-83.3	38.3	82.86144	0.795	-90.3	72.5	36.9	38.7	34.6	171.39681	17-18
19	-18.937	-13.923	1869.44638	-48.1	16.5	-85.3	45.8	86.84826	0.705	-96.3	74.8	37.2	46.4	34.5	194.94493	18-19
20	-26.478	-10.826	2034.02702	-39.3	24.6	-89.8	52.1	93.30205	0.562	-102.2	78.5	38.2	57.1	34.1	244.20894	19-20
21	-25.797	-18.992	1902.60788	-28.9	17.8	-83.9	60.4	88.41163	0.674	-101.1	71.2	43.4	48.8	19.0	222.95431	20-21
22	-25.517	-25.843	1833.07555	-16.1	11.0	-79.5	69.8	85.51494	0.738	-100.1	65.1	48.6	43.6	6.0	187.24051	21-22
23	-25.495	-32.112	1807.55553	-1.4	4.1	-75.6	80.1	83.88023	0.767	-99.3	59.6	53.9	41.4	-6.0	171.33913	22-23
24	-25.691	-38.198	1819.63312	13.5	-3.0	-71.5	1.2	83.24357	0.764	-98.7	54.5	59.0	42.5	-17.6	166.36656	23-24
25	-19.080	-37.986	1702.83205	18.2	-1.3	-73.1	89.5	79.01471	0.877	-94.5	52.5	58.6	30.9	-12.4	200.32909	24-25
26	-13.408	-37.917	1632.68311	27.3	-0.2	-75.8	87.5	76.15505	0.953	-90.2	51.2	58.4	20.6	-9.7	171.81139	25-26
27	-8.258	-37.937	1597.00734	50.5	0.6	-79.1	84.8	74.19994	1.000	-85.9	50.2	58.5	12.1	-8.8	156.00047	26-27
28	-4.014	-38.009	1589.26736	98.1	1.3	-82.3	79.5	71.60869	0.980	-82.2	49.7	58.9	9.2	-9.2	128.55245	27-28

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JULY 31, 1964 13 HR 13 MIN 29 SEC 36 MS

TAB NO 55 ATLAS PHOTO NO 55 POD SEQUENCE NO 116

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				739.764		1568.56329	-4.409	-33.562	3304.019	2.039	-73.090	116.746				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.694	-18.356	1716.09503	-16.0	6.8	-78.4	67.4	78.59198	0.898	-93.3	69.8	38.9	33.6	30.1	0.	0-1
2	-12.984	-27.454	1628.44130	-31.9	5.8	-79.9	58.1	77.39056	0.929	-90.2	61.1	47.6	21.7	11.8	272.00462	1-2
3	-8.034	-32.926	1576.07819	-7.4	2.6	-80.3	64.4	74.22528	1.000	-85.6	55.1	53.2	7.7	1.5	221.41779	2-3
4	-7.776	-27.924	1592.16660	-55.5	4.4	-81.2	48.9	75.31327	0.976	-85.2	60.0	47.9	13.7	11.9	150.28802	3-4
5	-7.503	-22.633	1637.40169	-70.2	6.2	-81.9	37.5	77.08983	0.927	-84.8	65.2	42.5	23.3	22.6	159.05411	4-5
6	-12.832	-21.895	1677.62044	-49.9	8.6	-81.5	47.1	79.35007	0.878	-90.2	66.5	42.2	29.1	22.9	162.88869	5-6
7	-18.731	-20.787	1756.37784	-37.1	12.1	-82.0	54.5	82.71604	0.798	-95.7	68.3	42.5	37.8	21.8	181.58734	6-7
8	-18.722	-26.795	1700.52234	-21.6	7.7	-79.2	64.7	80.43802	0.853	-95.2	62.7	47.9	31.9	10.0	172.34465	7-8
9	-18.827	-32.399	1680.41399	-7.0	3.3	-76.4	75.4	79.08863	0.879	-94.8	57.6	53.3	29.4	-1.3	160.72515	8-9
10	-13.173	-32.686	1611.07991	-3.2	2.9	-78.0	71.6	76.20383	0.954	-90.2	56.1	53.1	18.3	1.0	171.46223	9-10
11	-8.034	-32.926	1576.07819	-7.4	2.6	-80.3	64.4	74.22528	1.000	-85.6	55.1	53.2	7.7	1.5	155.83379	10-11
12	-4.066	-37.893	1578.97789	97.8	1.3	-82.2	78.9	71.12165	0.980	-82.2	49.8	58.9	9.1	-9.1	191.87127	11-12
13	-3.796	-33.114	1586.88374	-141.4	2.5	-82.6	54.6	71.63212	0.980	-81.6	54.5	53.7	1.6	0.8	144.64976	12-13
14	-3.483	-28.231	1584.69485	-96.4	3.5	-82.7	37.4	74.10265	0.996	-80.9	54.4	48.4	11.3	10.9	147.92182	13-14
15	-3.116	-23.074	1629.12570	-93.4	4.4	-82.6	26.8	75.78809	0.948	-80.1	64.5	43.1	21.8	21.3	156.32765	14-15
16	-2.672	-17.404	1707.86739	-92.3	5.2	-82.1	19.4	78.32744	0.870	-79.0	70.1	38.0	32.7	32.0	172.03764	15-16
17	-7.204	-16.794	1719.40060	-76.3	7.8	-82.4	29.0	79.78001	0.848	-84.2	71.0	37.2	34.0	33.7	138.51046	16-17
18	-12.725	-15.701	1765.92508	-60.3	11.4	-83.3	38.3	82.35983	0.795	-90.3	72.5	36.9	38.7	34.6	170.37054	17-18
19	-18.896	-13.955	1858.01646	-48.1	16.4	-85.3	45.8	86.31747	0.706	-96.3	74.6	37.2	46.3	34.5	193.70513	18-19
20	-26.382	-10.894	2021.04173	-39.3	24.5	-89.8	52.0	92.70666	0.564	-102.2	78.4	38.2	57.0	34.0	242.32444	19-20
21	-25.709	-18.498	1890.72169	-29.0	17.7	-83.9	60.3	87.85923	0.675	-101.1	71.1	43.4	48.7	19.0	271.38334	20-21
22	-25.429	-25.800	1821.51049	-16.2	11.0	-79.6	69.7	84.97794	0.739	-100.1	65.1	48.6	43.5	6.1	186.08697	21-22
23	-25.406	-32.025	1795.98970	-1.5	4.1	-75.7	80.0	81.34304	0.768	-99.3	59.7	53.9	41.4	-5.9	170.28582	22-23
24	-25.597	-38.067	1807.60884	13.4	-2.9	-71.6	1.0	82.69295	0.766	-98.7	54.6	59.0	42.3	-17.5	165.25662	23-24
25	-19.035	-37.863	1691.86987	18.0	-1.2	-73.2	89.2	78.50580	0.878	-94.5	52.6	58.6	30.8	-12.3	198.84562	24-25
26	-13.400	-37.799	1622.25072	27.0	-0.2	-75.8	87.2	75.66843	0.953	-90.2	51.3	58.4	20.5	-9.6	170.67599	25-26
27	-8.282	-37.821	1586.76770	50.0	0.7	-79.1	82.0	73.72356	1.000	-85.9	50.3	58.5	12.0	-8.7	155.00932	26-27
28	-4.066	-37.893	1578.97789	97.8	1.3	-82.2	78.9	71.12165	0.980	-82.2	49.8	58.9	9.1	-9.1	127.72992	27-28

				TAB NO		56		ATLAS PHOTO NO		56		POD SEQUENCE NO				118			
JULY 31, 1964 13 HR 13 MIN 34 SEC 155 MS																			
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				734.644		1558.57220		-4.433		-33.515		3294.027		2.041		-73.055		116.740	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.685	-18.375	1705.30484	-16.1	6.8	-78.4	67.2	78.10682	0.898	-93.3	69.8	38.9	33.6	30.0	0.	0-1			
2	-12.979	-27.400	1618.42064	-32.0	5.8	-79.9	58.0	76.91433	0.929	-90.2	61.2	47.6	21.7	11.8	269.91233	1-2			
3	-8.059	-32.841	1566.14807	-8.0	2.6	-80.3	64.2	73.75766	1.000	-85.6	55.2	53.2	7.8	1.6	220.09315	2-3			
4	-7.804	-27.869	1582.31194	-55.5	4.5	-81.2	48.9	74.84705	0.976	-85.2	60.1	47.9	13.7	12.0	149.36785	3-4			
5	-7.532	-22.609	1627.87010	-70.1	6.2	-81.9	37.6	76.61749	0.927	-84.8	65.2	42.5	23.3	22.6	158.10431	4-5			
6	-12.828	-21.874	1667.40782	-49.9	8.7	-81.6	47.1	78.86701	0.788	-90.2	66.5	42.2	29.1	22.9	161.90839	5-6			
7	-18.691	-20.773	1745.62956	-37.1	12.1	-82.0	54.5	82.20990	0.798	-95.7	68.3	42.5	37.7	21.8	180.44914	6-7			
8	-18.681	-26.744	1690.01308	-21.7	7.7	-79.2	64.6	79.94084	0.853	-95.2	62.8	47.9	31.9	10.1	171.31783	7-8			
9	-18.784	-32.313	1669.82422	-2.2	3.3	-76.4	76.2	78.59025	0.879	-94.8	57.6	53.3	29.4	-1.2	159.74732	8-9			
10	-13.167	-32.600	1600.97903	-3.4	2.9	-78.1	71.3	75.72605	0.954	-90.2	56.2	53.1	18.3	1.1	170.36208	9-10			
11	-8.059	-32.841	1566.14807	-8.0	2.6	-80.3	64.2	73.75766	1.000	-85.6	55.2	53.2	7.8	1.6	154.86485	10-11			
12	-4.118	-37.777	1568.68103	97.5	1.3	-82.2	78.3	70.63461	0.979	-82.2	49.9	58.9	9.0	-9.0	190.63499	11-12			
13	-3.848	-33.029	1558.89439	-137.7	2.5	-82.6	54.4	71.17624	0.980	-81.6	54.6	53.7	1.6	0.9	143.70031	12-13			
14	-3.537	-28.175	1574.77464	-96.1	3.5	-82.7	37.5	73.63855	0.996	-80.9	59.4	48.4	11.4	11.0	147.00555	13-14			
15	-3.172	-23.049	1619.02658	-93.2	4.4	-82.5	26.9	75.31784	0.947	-80.1	64.5	43.1	21.8	21.3	155.38101	14-15			
16	-2.730	-17.415	1697.28438	-92.2	5.2	-82.1	19.5	77.84141	0.870	-79.0	70.1	38.0	32.7	32.0	170.97243	15-16			
17	-7.234	-16.806	1708.88074	-76.2	7.8	-82.4	29.1	79.29157	0.848	-84.2	71.0	37.2	34.0	33.7	137.66850	16-17			
18	-12.722	-15.718	1755.17586	-60.3	11.4	-83.3	38.3	81.85850	0.795	-90.3	72.4	36.9	38.6	34.6	169.34488	17-18			
19	-18.854	-13.986	1846.59654	-48.2	16.4	-85.3	45.8	85.78714	0.707	-96.3	74.7	37.2	46.3	34.4	192.46800	18-19			
20	-26.285	-10.960	2008.08167	-39.3	24.4	-89.7	52.0	92.11244	0.566	-102.2	78.4	38.2	56.9	33.9	240.45209	19-20			
21	-25.620	-18.999	1878.84178	-29.1	17.7	-83.9	60.3	87.30711	0.676	-101.1	71.1	43.4	48.6	19.1	219.82894	20-21			
22	-25.342	-25.756	1810.06647	-16.3	11.0	-79.6	69.5	84.44086	0.740	-100.1	65.1	48.6	43.4	6.2	184.93659	21-22			
23	-25.317	-31.938	1784.41846	-1.6	4.2	-75.8	79.8	82.80560	0.769	-99.3	59.7	53.9	41.3	-5.8	169.23306	22-23			
24	-25.502	-37.935	1795.57834	13.3	-2.8	-71.7	0.7	82.14202	0.767	-98.7	54.7	59.0	42.2	-17.3	164.14699	23-24			
25	-18.989	-37.740	1680.89790	17.8	-1.2	-73.3	88.9	77.99644	0.879	-94.5	52.7	58.6	30.8	-12.1	197.36407	24-25			
26	-13.392	-37.681	1611.80841	26.8	-0.1	-75.9	86.8	75.18135	0.954	-90.2	51.4	58.4	20.5	-9.5	169.53965	25-26			
27	-8.307	-37.704	1576.51909	49.6	0.7	-79.1	81.5	73.22987	1.000	-85.9	50.5	58.5	11.9	-8.6	154.01725	26-27			
28	-4.118	-37.777	1568.68103	97.5	1.3	-82.2	78.3	70.63461	0.979	-82.2	49.9	58.9	9.0	-9.0	126.90669	27-28			

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JULY 31, 1964 13 HR 13 MIN 39 SEC 275 MS TAB NO 57 ATLAS PHOTO NO 57 POD SEQUENCE NO 120

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.676	-18.393	1694.50354	-16.3	6.8	-78.4	67.0	77.62113	0.898	-93.3	69.7	38.9	33.5	30.0	0.	0-1
2	-12.974	-27.347	1608.38889	-32.1	5.8	-79.9	57.9	76.43758	0.929	-90.2	61.2	47.6	21.7	11.9	267.82060	1-2
3	-8.085	-32.756	1556.21028	-8.5	2.6	-80.3	64.0	73.28967	1.000	-85.6	55.3	53.2	7.8	1.7	218.76668	2-3
4	-7.831	-27.814	1572.44733	-55.5	4.5	-81.2	48.8	74.38037	0.976	-85.2	60.1	47.9	13.8	12.0	148.44683	3-4
5	-7.561	-22.585	1617.82690	-70.1	6.2	-81.9	37.6	76.14461	0.926	-84.8	65.3	42.5	23.3	22.7	157.15312	4-5
6	-12.825	-21.854	1657.18231	-50.0	8.7	-81.6	47.1	78.38335	0.878	-90.2	66.5	42.2	29.1	23.0	160.92668	5-6
7	-18.651	-20.760	1734.86797	-37.2	12.1	-82.0	54.4	81.70313	0.798	-95.7	68.3	42.5	37.7	21.8	179.31473	6-7
8	-18.640	-26.694	1679.49240	-21.8	7.8	-79.3	64.4	79.44312	0.853	-95.2	62.8	47.9	31.8	10.1	170.28939	7-8
9	-18.742	-32.227	1659.22583	-2.4	3.4	-76.5	75.9	78.09126	0.880	-94.8	57.7	53.3	29.3	-1.1	158.76887	8-9
10	-13.161	-32.515	1590.86946	-3.7	2.9	-78.1	71.1	77.24786	0.954	-90.2	56.3	53.1	18.3	1.2	169.26121	9-10
11	-8.085	-32.756	1556.21028	-8.5	2.6	-80.3	64.0	73.28967	1.000	-85.6	55.3	53.2	7.8	1.7	153.89485	10-11
12	-4.169	-37.660	1558.38110	97.2	1.3	-82.2	77.7	70.14810	0.979	-82.2	50.0	58.9	8.9	-8.9	189.39887	11-12
13	-3.901	-32.943	1548.89874	-134.1	2.5	-82.5	54.3	70.72029	0.980	-81.6	54.7	53.7	1.6	1.0	142.75112	12-13
14	-3.591	-28.119	1564.84602	-95.7	3.5	-82.6	37.6	73.17407	0.996	-80.9	59.5	48.4	11.4	11.0	146.08854	13-14
15	-3.228	-23.025	1608.91754	-93.0	4.5	-82.5	27.0	74.84713	0.947	-80.1	64.6	43.1	21.8	21.3	154.43321	14-15
16	-2.788	-17.425	1686.69070	-92.1	5.2	-82.0	19.7	77.35490	0.870	-79.0	70.1	38.0	32.7	32.0	169.90602	15-16
17	-7.265	-16.817	1698.34828	-76.2	7.8	-82.4	29.2	78.80256	0.848	-84.2	71.0	37.2	34.0	33.7	136.82538	16-17
18	-12.719	-15.736	1744.41260	-60.3	11.4	-83.3	38.3	81.35653	0.795	-90.3	72.4	36.9	38.6	34.6	168.31773	17-18
19	-18.812	-14.018	1835.16254	-48.2	16.4	-85.3	45.8	85.25616	0.707	-96.3	74.7	37.2	46.2	34.4	191.22969	18-19
20	-26.189	-11.026	1995.11412	-39.4	24.3	-89.7	52.0	91.51787	0.567	-102.2	78.3	38.2	56.8	33.9	238.58414	19-20
21	-25.531	-19.002	1866.95102	-29.1	17.6	-83.9	60.2	86.75450	0.677	-101.1	71.1	43.4	48.6	19.1	218.27408	20-21
22	-25.254	-25.712	1798.54898	14.4	10.9	-79.7	69.4	83.90135	0.740	-100.1	65.1	48.6	43.4	6.3	183.78489	21-22
23	-25.227	-31.851	1772.84135	-1.7	4.2	-75.8	79.6	82.26789	0.770	-99.4	59.8	53.9	41.2	-5.6	168.17339	22-23
24	-25.408	-37.803	1783.54816	13.1	-2.7	-71.9	6.5	81.59111	0.769	-98.7	54.7	59.0	42.1	-17.1	163.03860	23-24
25	-18.943	-37.617	1649.92160	17.6	-1.1	-73.4	88.6	77.48688	0.879	-94.5	52.8	58.6	30.7	-12.0	195.88535	24-25
26	-13.383	-37.562	1601.36084	26.5	-0.1	-76.0	86.4	74.69402	0.954	-90.2	51.5	58.4	20.4	-9.4	168.40350	25-26
27	-8.331	-37.587	1566.26598	49.1	0.7	-79.1	81.1	72.73651	1.000	-85.9	50.6	58.5	11.9	-8.5	153.02458	26-27
28	-4.169	-37.660	1558.38110	97.2	1.3	-82.2	77.7	70.14810	0.979	-82.2	50.0	58.9	8.9	-8.9	126.08305	27-28

JULY 31, 1964 13 HR 13 MIN 44 SEC 395 MS TAB NO 58 ATLAS PHOTO NO 58 POD SEQUENCE NO 122

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.666	-18.412	1683.69077	-16.4	6.8	-78.5	66.9	77.13513	0.898	-93.3	69.7	38.9	33.5	30.0	0.	0-1
2	-12.970	-27.292	1598.35300	-32.2	5.8	-79.9	57.8	75.96063	0.929	-90.2	61.3	47.6	21.8	11.9	265.69363	1-2
3	-8.111	-32.669	1546.26508	-9.1	2.6	-80.3	63.7	72.82134	1.000	-85.6	55.4	53.2	7.9	1.8	217.44059	2-3
4	-7.858	-27.758	1562.57927	-55.5	4.5	-81.2	48.7	73.91352	0.975	-85.2	60.2	47.9	13.9	12.1	147.52595	3-4
5	-7.590	-22.560	1607.78587	-70.0	6.2	-81.9	37.6	75.67183	0.926	-84.8	65.3	42.5	23.4	22.7	156.20358	4-5
6	-12.821	-21.832	1646.95865	-50.0	8.7	-81.6	47.1	77.89978	0.878	-90.2	66.5	42.2	29.1	23.0	159.94505	5-6
7	-18.610	-20.746	1724.11000	-37.2	12.1	-82.0	54.3	81.19653	0.798	-95.7	68.3	42.5	37.7	21.8	178.18136	6-7
8	-18.599	-26.642	1668.96815	-21.9	7.8	-79.3	64.3	78.94523	0.854	-95.2	62.8	47.9	31.8	10.2	169.26337	7-8
9	-18.699	-32.139	1648.61917	-2.5	3.4	-76.6	75.7	77.59188	0.880	-94.8	57.8	53.3	29.3	-1.0	157.78990	8-9
10	-13.154	-32.428	1580.75151	-4.0	2.9	-78.2	70.9	74.76928	0.954	-90.2	56.4	53.1	18.3	1.2	168.15969	9-10
11	-8.111	-32.669	1546.26508	-9.1	2.6	-80.3	63.7	72.82134	1.000	-85.6	55.4	53.2	7.9	1.8	152.92408	10-11
12	-4.221	-37.542	1548.07257	96.9	1.3	-82.1	77.0	69.66142	0.979	-82.2	50.2	58.9	8.7	-8.7	188.16223	11-12
13	-3.953	-32.856	1538.89723	-130.5	2.5	-82.5	54.1	70.26434	0.980	-81.6	54.8	53.7	1.6	1.1	141.80147	12-13
14	-3.645	-28.063	1554.91534	-95.4	3.6	-82.6	37.6	72.70947	0.996	-80.9	59.6	48.4	11.4	11.1	145.17178	13-14
15	-3.283	-22.999	1598.81195	-92.9	4.5	-82.5	27.2	74.37656	0.947	-80.1	64.6	43.1	21.8	21.4	153.48711	14-15
16	-2.847	-17.434	1676.10912	-91.9	5.3	-82.0	19.8	76.86892	0.870	-79.1	70.1	38.0	32.7	32.0	168.84423	15-16
17	-7.295	-16.828	1687.82668	-76.1	7.8	-82.3	29.3	78.31404	0.848	-84.2	70.9	37.2	34.0	33.7	135.98336	16-17
18	-12.716	-15.752	1733.66100	-60.3	11.4	-83.3	38.4	80.85509	0.795	-90.3	72.4	36.9	38.6	34.6	167.29182	17-18
19	-18.770	-14.047	1823.74487	-48.2	16.3	-85.3	45.8	84.72594	0.708	-96.3	74.7	37.2	46.2	34.4	189.99481	18-19
20	-26.093	-11.090	1982.18005	-39.4	24.2	-89.7	51.9	90.92484	0.569	-102.2	78.2	38.2	56.7	33.8	236.72996	19-20
21	-25.442	-19.003	1855.07097	-29.2	17.5	-83.9	60.1	86.20237	0.678	-101.1	71.1	43.4	48.5	19.1	216.73445	20-21
22	-25.167	-25.667	1787.03366	-16.5	10.9	-79.7	69.3	83.36583	0.741	-100.1	65.1	48.6	43.3	6.3	182.63751	21-22
23	-25.138	-31.763	1761.25880	-1.9	4.2	-75.9	79.4	81.72990	0.771	-99.4	59.8	53.9	41.1	-5.5	167.12667	22-23
24	-25.313	-37.670	1771.50972	13.0	-2.6	-72.0	0.2	81.03980	0.770	-98.7	54.8	59.0	42.0	-16.9	161.92996	23-24
25	-18.897	-37.493	1658.93393	17.4	-1.1	-73.5	88.3	76.97677	0.880	-94.5	52.9	58.6	30.6	-11.9	194.40797	24-25
26	-13.375	-37.442	1590.90196	26.2	-0.1	-76.0	86.1	74.20617	0.954	-90.2	51.6	58.4	20.4	-9.2	167.26629	25-26
27	-8.356	-37.469	1556.00262	48.6	0.7	-79.1	80.6	72.24273	0.999	-85.9	50.7	58.5	11.8	-8.3	152.03070	26-27
28	-4.221	-37.542	1548.07257	96.9	1.3	-82.1	77.0	69.66142	0.979	-82.2	50.2	58.9	8.7	-8.7	125.25869	27-28

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JULY 31, 1964 13 HR 13 MIN 49 SEC 515 MS TAB NO 59 ATLAS PHOTO NO 59 POD SEQUENCE NO 124

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				719.284		1528.54526	-4.505	-33.371	3264.001	2.048	-72.948	116.721				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.657	-18.431	1672.86659	-16.6	6.8	-78.5	66.7	76.65034	0.898	-93.3	69.7	38.9	33.5	29.9	0.	0-1
2	-12.964	-27.228	1588.36157	-32.4	5.9	-80.0	57.6	75.48580	0.929	-90.2	61.3	47.6	21.8	12.0	263.29932	1-2
3	-8.136	-32.574	1536.31775	-9.8	2.7	-80.3	63.4	72.35291	0.999	-85.6	55.5	53.2	7.9	1.9	216.12865	2-3
4	-7.884	-27.693	1552.75327	-55.5	4.5	-81.2	48.6	73.44864	0.975	-85.2	60.3	47.8	13.9	12.2	146.61209	3-4
5	-7.617	-22.526	1597.83965	-69.9	6.2	-81.9	37.6	75.20345	0.926	-84.8	65.3	42.5	23.4	22.7	155.27561	4-5
6	-12.817	-21.801	1636.83688	-50.0	8.7	-81.6	47.0	82.10202	0.877	-90.2	66.6	42.2	29.1	23.0	158.97437	5-6
7	-18.570	-20.720	1713.47034	-37.3	12.0	-82.1	54.2	80.69552	0.798	-95.7	68.4	42.5	37.7	21.9	177.06455	6-7
8	-18.558	-26.581	1658.45530	-22.1	7.8	-79.3	64.1	78.44975	0.854	-95.2	62.9	47.9	31.8	10.3	168.26483	7-8
9	-18.656	-32.063	1638.01009	-2.9	3.4	-76.6	75.5	77.04232	0.880	-94.8	57.8	53.3	29.3	-0.9	156.82098	8-9
10	-13.147	-32.333	1570.63065	-4.3	3.0	-78.2	70.6	74.29056	0.954	-90.2	56.4	53.1	18.3	1.3	167.05828	9-10
11	-8.135	-32.574	1536.31775	-9.8	2.7	-80.3	63.4	72.35291	0.999	-85.6	55.5	53.2	7.9	1.9	151.95271	10-11
12	-4.272	-37.415	1537.72302	96.6	1.3	-82.1	76.3	69.17040	0.978	-82.2	50.3	58.9	8.6	-8.6	186.92353	11-12
13	-4.005	-32.761	1528.89511	-126.6	2.5	-82.5	53.9	69.80909	0.980	-81.6	54.9	53.7	1.7	1.2	140.84786	12-13
14	-3.698	-27.997	1545.02715	-95.0	3.6	-82.6	37.6	72.24679	0.996	-80.9	59.6	48.4	11.5	11.2	144.26198	13-14
15	-3.338	-22.964	1588.80009	-92.7	4.5	-82.5	27.3	73.91021	0.947	-80.1	64.6	43.1	21.9	21.4	152.56186	14-15
16	-2.904	-17.432	1665.69069	-91.8	5.3	-82.0	20.0	76.39017	0.870	-79.0	70.1	38.0	32.7	32.0	167.82472	15-16
17	-7.325	-16.827	1677.47186	-76.0	7.9	-82.3	29.3	77.83313	0.848	-84.2	70.9	37.2	34.0	33.7	135.15486	16-17
18	-12.713	-15.756	1723.09142	-60.3	11.4	-83.2	38.3	80.36213	0.795	-90.3	72.4	36.9	38.6	34.6	166.28593	17-18
19	-18.729	-14.064	1812.54440	-48.2	16.3	-85.3	45.7	84.20587	0.708	-96.3	74.6	37.2	46.2	34.4	188.79327	18-19
20	-25.999	-11.137	1969.54980	-39.4	24.1	-89.6	51.9	90.34581	0.570	-102.2	78.2	38.2	56.6	33.7	234.95241	19-20
21	-25.354	-18.992	1843.34627	-29.3	17.5	-84.0	60.0	85.65743	0.678	-101.1	71.1	43.4	48.4	19.1	215.29911	20-21
22	-25.079	-25.610	1775.58592	-16.6	10.9	-79.8	69.1	82.83135	0.742	-100.2	65.2	48.6	43.2	6.4	181.33258	21-22
23	-25.048	-31.664	1749.67757	-2.0	4.3	-76.0	79.2	81.19178	0.771	-99.4	59.9	53.9	41.0	-5.4	166.08778	22-23
24	-25.218	-37.526	1759.41260	12.8	-2.5	-72.1	89.9	80.48554	0.771	-98.7	54.9	59.0	41.9	-16.7	160.81617	23-24
25	-18.850	-37.359	1647.89368	17.2	-1.0	-73.7	88.0	76.46415	0.881	-94.5	53.0	58.6	30.5	-11.7	192.92312	24-25
26	-13.366	-37.313	1580.39558	25.8	-0.0	-76.1	85.6	73.71611	0.955	-90.2	51.7	58.4	20.3	-9.1	166.12293	25-26
27	-8.380	-37.343	1545.69559	48.0	0.7	-79.1	80.1	71.74405	0.999	-85.9	50.8	58.5	11.7	-8.2	151.03174	26-27
28	-4.272	-37.415	1537.72302	96.6	1.3	-82.1	76.3	69.17040	0.978	-82.2	50.3	58.9	8.6	-8.6	124.43084	27-28

JULY 31, 1964 13 HR 13 MIN 54 SEC 635 MS TAB NO 60 ATLAS PHOTO NO 60 POD SEQUENCE NO 126

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				714.164			1518.51810	-4.530	-33.322	3253.973	2.050	-72.911	116.715			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.648	-18.450	1662.03102	-16.8	6.8	-78.6	66.5	76.16504	0.898	-93.3	69.7	39.0	33.4	29.9	0.	0-1
2	-12.959	-27.165	1578.35854	-32.5	5.9	-80.0	57.5	75.01041	0.928	-90.2	61.4	47.6	21.8	12.1	260.90933	1-2
3	-8.161	-32.479	1526.36316	-10.5	2.7	-80.3	63.1	71.88415	0.999	-85.6	55.6	53.2	8.0	2.0	214.81490	2-3
4	-7.911	-27.628	1542.91682	-55.6	4.5	-81.2	48.5	72.98327	0.975	-85.2	60.3	47.8	14.0	12.3	145.69742	3-4
5	-7.645	-22.492	1587.88025	-69.9	6.3	-81.8	37.6	74.73444	0.926	-84.8	65.4	42.5	23.5	22.8	154.34590	4-5
6	-12.813	-21.770	1626.70052	-50.1	8.7	-81.6	46.9	76.94157	0.877	-90.2	66.6	42.2	29.2	23.1	158.00204	5-6
7	-18.529	-20.695	1702.81532	-37.4	12.0	-82.1	54.1	80.19378	0.799	-95.7	68.4	42.5	37.7	21.9	175.94612	6-7
8	-18.517	-26.519	1648.01045	-22.2	7.8	-79.4	64.0	77.95370	0.854	-95.2	62.9	47.9	31.8	10.3	167.26812	7-8
9	-18.612	-31.946	1627.39297	-3.0	3.5	-76.7	75.2	76.59239	0.880	-94.8	57.9	53.3	29.3	-0.7	155.85106	8-9
10	-13.140	-32.237	1560.50160	-4.6	3.0	-78.2	70.3	73.81145	0.953	-90.2	56.5	53.0	18.3	1.5	165.95613	9-10
11	-8.161	-32.479	1526.36316	-10.5	2.7	-80.3	63.1	71.88415	0.999	-85.6	55.6	53.2	8.0	2.0	150.98049	10-11
12	-4.323	-37.289	1527.37178	96.1	1.3	-82.1	75.6	68.68012	0.978	-82.2	50.4	58.9	8.5	-8.5	185.68515	11-12
13	-4.057	-32.666	1518.88716	-122.9	2.5	-82.4	53.7	69.35384	0.980	-81.6	55.0	53.7	1.7	1.3	139.89472	12-13
14	-3.751	-27.932	1535.12999	-94.7	3.6	-82.5	37.6	71.78369	0.995	-80.9	59.7	48.4	11.6	11.3	143.35150	13-14
15	-3.393	-22.929	1578.77676	-92.5	4.5	-82.4	27.4	73.44333	0.947	-80.1	64.7	43.1	21.9	21.5	151.63514	14-15
16	-2.960	-17.430	1655.25861	-91.7	5.3	-82.0	20.1	75.91081	0.870	-79.0	70.1	38.0	32.7	32.0	166.80321	15-16
17	-7.354	-16.827	1667.10146	-76.0	7.9	-82.3	29.4	77.35151	0.848	-84.2	70.9	37.2	34.0	33.7	134.32533	16-17
18	-12.709	-15.761	1712.50453	-60.3	11.4	-83.2	38.3	79.86837	0.795	-90.3	72.4	36.9	38.6	34.6	165.27808	17-18
19	-18.688	-14.081	1801.32585	-48.3	16.3	-85.3	45.7	83.68495	0.708	-96.3	74.6	37.2	46.1	34.4	187.58986	18-19
20	-25.905	-11.184	1956.90520	-39.5	24.0	-89.6	51.8	89.76613	0.571	-102.2	78.1	38.2	56.5	33.7	233.17675	19-20
21	-25.265	-18.981	1831.60791	-29.3	17.4	-86.0	59.9	85.11186	0.679	-101.1	71.1	43.3	48.4	19.2	213.86239	20-21
22	-24.991	-25.554	1764.12810	-16.7	10.9	-79.8	69.0	82.29641	0.742	-100.2	65.2	48.6	43.2	6.5	180.42537	21-22
23	-24.957	-31.566	1738.09126	-2.2	4.3	-76.1	79.0	80.65343	0.772	-99.4	59.9	53.8	41.0	-5.2	165.04798	22-23
24	-25.122	-37.383	1747.31824	12.6	-2.4	-72.2	89.7	79.93142	0.773	-98.7	55.0	59.0	41.8	-16.5	159.70398	23-24
25	-18.803	-37.226	1636.85121	16.9	-0.9	-73.8	87.6	75.95142	0.881	-94.5	53.1	58.6	30.5	-11.5	191.44176	24-25
26	-13.357	-37.184	1569.88559	25.5	-0.0	-76.2	85.2	73.22588	0.955	-90.2	51.9	58.4	20.3	-8.9	164.97970	25-26
27	-8.403	-37.216	1535.38544	47.4	0.7	-79.1	79.5	71.24593	0.999	-85.9	51.0	58.5	11.7	-8.1	150.03248	26-27
28	-4.323	-37.289	1527.37178	96.3	1.3	-82.1	75.6	68.68012	0.978	-82.2	50.4	58.9	8.5	-8.5	123.60278	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 13 MIN 59 SEC 755 MS

TAB NO 61

ATLAS PHOTO NO 61

POD SEQUENCE NO 128

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
				709.044		1508.48190	-4.554	-33.274	3243.937	2.052	-72.875	116.709			
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.639	-18.469	1651.18407	-17.0	6.8	-78.6	66.2	75.67927	0.897	-93.3	69.7	39.0	33.4	29.9	0- 1
2	-12.953	-27.101	1568.34613	-32.7	5.9	-80.0	57.3	74.53458	0.928	-90.2	61.5	47.6	21.9	12.2	258.51336 1- 2
3	-8.186	-32.384	1516.40161	-11.1	2.7	-80.3	62.9	71.41505	0.999	-85.6	55.7	53.2	8.0	2.1	213.49982 2- 3
4	-7.937	-27.563	1533.07201	-55.6	4.5	-81.2	48.4	72.51750	0.974	-85.2	60.4	47.8	14.1	12.3	144.78221 3- 4
5	-7.673	-22.458	1577.91191	-69.9	6.3	-81.8	37.6	74.26502	0.925	-84.8	65.4	42.4	23.5	22.8	153.41544 4- 5
6	-12.809	-21.738	1616.55406	-50.1	8.7	-81.6	46.9	76.46164	0.877	-90.2	66.6	42.2	29.2	23.1	157.02854 5- 6
7	-18.488	-20.670	1692.15013	-37.5	12.0	-82.1	54.0	79.69157	0.799	-95.7	68.4	42.5	37.7	21.9	174.82689 6- 7
8	-18.475	-26.458	1637.51610	-22.3	7.8	-79.4	63.8	77.45719	0.854	-95.2	63.0	47.9	31.8	10.4	166.26854 7- 8
9	-18.568	-31.850	1616.76825	-3.2	3.5	-76.8	75.0	76.09210	0.881	-94.8	58.0	53.3	29.2	-0.6	154.88049 8- 9
10	-13.133	-32.142	1550.36470	-4.9	3.0	-78.3	70.0	73.33197	0.953	-90.2	56.6	53.0	18.3	1.6	164.85356 9-10
11	-8.186	-32.384	1516.40161	-11.1	2.7	-80.3	62.9	71.41505	0.999	-85.6	55.7	53.2	8.0	2.1	150.00745 10-11
12	-4.374	-37.163	1517.01749	95.9	1.3	-82.0	75.0	68.19040	0.978	-82.2	50.6	58.9	8.3	-8.3	184.44691 11-12
13	-4.109	-32.571	1508.87369	-119.4	2.5	-82.4	53.4	68.89862	0.980	-81.6	55.1	53.7	1.8	1.4	138.94193 12-13
14	-3.804	-27.867	1525.22591	-94.4	3.6	-82.5	37.6	71.32026	0.995	-80.9	59.8	48.4	11.6	11.3	142.44058 13-14
15	-3.447	-22.894	1568.74596	-92.3	4.6	-82.4	27.5	72.97611	0.946	-80.1	64.7	43.1	21.9	21.5	150.70777 14-15
16	-3.017	-17.429	1644.81960	-91.6	5.4	-81.9	20.2	75.43113	0.870	-79.0	70.1	37.9	32.7	32.0	165.78139 15-16
17	-7.384	-16.826	1656.72238	-75.9	7.9	-82.3	29.4	76.86949	0.848	-84.2	71.0	37.2	34.0	33.7	133.49510 16-17
18	-12.706	-15.766	1701.90796	-60.3	11.4	-83.2	38.3	79.37415	0.795	-90.3	72.4	36.8	38.6	34.6	164.26916 17-18
19	-18.646	-14.097	1790.09805	-48.3	16.2	-85.3	45.7	83.16360	0.709	-96.3	74.6	37.2	46.1	34.3	186.38597 18-19
20	-25.811	-11.231	1944.25807	-39.6	23.9	-89.6	51.7	89.18631	0.573	-102.2	78.1	38.2	56.4	33.7	231.40567 19-20
21	-25.177	-15.070	1819.84230	-29.4	17.4	-84.0	59.8	84.56595	0.680	-101.1	71.1	43.3	48.3	19.2	212.42815 20-21
22	-24.903	-25.498	1752.66301	-16.8	10.9	-79.9	66.6	81.75112	0.743	-100.7	65.2	48.6	43.1	6.6	179.31773 21-22
23	-24.867	-31.467	1726.50023	-2.3	4.4	-76.2	78.7	80.11487	0.773	-99.4	60.0	53.8	40.9	-5.1	164.50772 22-23
24	-25.026	-37.240	1735.22441	12.5	-2.3	-72.4	89.4	79.37732	0.774	-98.7	55.1	59.0	41.7	-16.3	158.59320 23-24
25	-18.756	-37.092	1625.80432	16.7	-0.9	-73.9	87.3	75.43848	0.882	-94.5	53.2	58.5	30.4	-11.4	189.96335 24-25
26	-13.347	-37.055	1559.37045	25.1	0.0	-76.2	84.8	72.73540	0.955	-90.2	52.0	58.4	20.2	-8.8	163.83648 25-26
27	-8.427	-37.089	1525.07083	46.9	0.8	-79.2	78.0	70.74817	0.998	-85.9	51.1	58.5	11.6	-7.9	149.03254 26-27
28	-4.374	-37.163	1517.01749	95.9	1.3	-82.0	75.0	68.19040	0.978	-82.2	50.6	58.9	8.3	-8.3	122.77432 27-28

JULY 31, 1964 13 HR 14 MIN 4 SEC 875 MS

TAB NO 62

ATLAS PHOTO NO 62

POD SEQUENCE NO 130

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				703.925		1498.43649	-4.579	-33.225	3233.892	2.054	-72.839	116.702			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.629	-18.488	1640.32555	-17.2	6.8	-78.7	66.0	75.19327	0.897	-93.3	69.7	39.0	33.4	29.8	0- 1
2	-12.948	-27.036	1558.33125	-32.9	5.9	-80.0	57.1	74.05863	0.928	-90.2	61.5	47.6	21.9	12.2	256.07785 1- 2
3	-8.211	-32.288	1506.43381	-11.8	2.7	-80.3	62.6	70.94566	0.999	-85.6	55.8	53.2	8.1	2.2	212.18556 2- 3
4	-7.964	-27.497	1523.22533	-55.7	4.6	-81.2	48.3	72.05163	0.974	-85.2	60.5	47.8	14.2	12.4	143.86749 3- 4
5	-7.701	-22.422	1567.94781	-69.8	6.3	-81.8	37.6	73.79579	0.925	-84.8	65.4	42.4	23.6	22.9	152.48703 4- 5
6	-12.804	-21.705	1606.41187	-50.2	8.7	-81.6	46.8	75.98192	0.877	-90.2	66.6	42.2	29.2	23.1	156.05558 5- 6
7	-18.448	-20.643	1681.49121	-37.6	12.0	-82.1	53.9	79.18965	0.799	-95.7	68.4	42.5	37.7	22.0	173.70884 6- 7
8	-18.433	-26.395	1627.02017	-22.5	7.8	-79.5	63.6	76.96062	0.854	-95.2	63.0	47.9	31.8	10.5	165.27191 7- 8
9	-18.525	-31.752	1606.13667	-3.4	3.6	-76.9	74.7	75.59147	0.881	-94.8	58.1	53.2	29.2	-0.5	153.91073 8- 9
10	-13.126	-32.045	1540.22067	-5.3	3.0	-78.3	69.7	72.85216	0.953	-90.2	56.7	53.0	18.4	1.7	163.75048 9-10
11	-8.211	-32.288	1506.43381	-11.8	2.7	-80.3	62.6	70.94566	0.999	-85.6	55.8	53.2	8.1	2.2	149.03367 10-11
12	-4.425	-37.035	1506.65547	95.6	1.3	-82.0	74.3	67.70065	0.977	-82.2	50.7	58.9	8.2	-8.2	183.20874 11-12
13	-4.161	-32.474	1498.85538	-116.1	2.5	-82.3	53.2	68.44354	0.980	-81.6	55.2	53.7	1.8	1.5	137.98903 12-13
14	-3.857	-27.800	1515.32123	-94.0	3.6	-82.5	37.6	70.85680	0.995	-80.9	59.8	48.4	11.7	11.4	141.53026 13-14
15	-3.502	-22.857	1558.72064	-92.2	4.6	-82.4	27.6	72.50912	0.946	-80.1	64.7	43.1	22.0	21.6	149.78251 14-15
16	-3.074	-17.426	1634.39529	-91.5	5.4	-81.9	20.4	74.95210	0.870	-79.0	70.1	37.9	32.7	32.1	164.76469 15-16
17	-7.413	-16.824	1646.35703	-75.9	7.9	-82.3	29.5	76.88009	0.847	-84.2	71.0	37.1	34.0	33.7	132.66613 16-17
18	-12.702	-15.769	1691.32611	-60.3	11.4	-83.2	38.3	78.88062	0.795	-90.3	72.4	36.8	38.6	34.6	163.26185 17-18
19	-18.604	-14.112	1778.89001	-48.3	16.2	-85.3	45.6	82.64317	0.709	-96.3	74.6	37.2	46.1	34.3	185.18597 18-19
20	-25.717	-11.276	1931.64723	-39.6	23.8	-89.6	51.7	88.60817	0.574	-102.2	78.0	38.2	56.4	33.6	229.64801 19-20
21	-25.088	-18.957	1808.13025	-29.5	17.3	-84.0	59.7	84.02066	0.681	-101.1	71.1	43.3	48.3	19.3	211.00916 20-21
22	-24.816	-25.440	1741.20053	-17.0	10.9	-80.0	68.6	81.22595	0.744	-100.2	65.3	48.6	43.1	6.7	178.21498 21-22
23	-24.777	-31.368	1714.90590	-2.5	4.5	-76.3	78.5	79.57611	0.774	-99.4	60.0	53.8	40.8	-4.9	162.96903 22-23
24	-24.930	-37.095	1723.12395	12.3	-2.2	-72.5	89.1	78.82289	0.776	-98.7	55.2	59.0	41.5	-16.1	157.48298 23-24
25	-18.709	-36.957	1614.74733	16.5	-0.8	-74.0	86.9	74.92507	0.883	-94.5	53.4	58.5	30.3	-11.2	188.48651 24-25
26	-13.338	-36.925	1548.84494	24.7	0.1	-76.3	84.4	72.24444	0.956	-90.2	52.1	58.4	20.1	-8.7	162.69263 25-26
27	-8.451	-36.961	1514.74687	46.3	0.8	-79.2	78.4	70.25015	0.998	-85.9	51.2	58.5	11.5	-7.8	148.03149 26-27
28	-4.425	-37.035	1506.65547	95.6	1.3	-82.0	74.3	67.70065	0.977	-82.2	50.7	58.9	8.2	-8.2	121.94537 27-28

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JULY 31, 1964 13 HR 14 MIN 9 SEC 995 MS TAB NO 63 ATLAS PHOTO NO 63 POD SEQUENCE NO 132

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				698.805		1488.38162		-4.603		-33.175		3223.837		2.057		-72.802		116.696	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.620	-18.507	1629.45518	-17.4	6.8	-78.7	65.8	74.70673	0.897	-93.4	69.6	39.0	33.3	29.8	0.	0-1			
2	-12.942	-26.971	1548.30431	-33.0	5.9	-80.1	57.0	73.58210	0.927	-90.2	61.6	47.6	22.0	12.3	253.64732	1-2			
3	-8.236	-32.191	1496.45844	-12.5	2.7	-80.3	62.3	70.47592	0.999	-85.6	55.9	53.2	8.1	2.3	210.86928	2-3			
4	-7.990	-27.431	1513.36772	-55.7	4.6	-81.2	48.2	71.58526	0.974	-85.2	60.5	47.8	14.3	12.5	142.95190	3-4			
5	-7.728	-22.387	1557.96996	-69.8	6.3	-81.8	37.6	73.32592	0.924	-84.8	65.5	42.4	23.6	22.9	151.55685	4-5			
6	-12.800	-21.672	1596.25446	-50.2	8.7	-81.6	46.7	75.50148	0.876	-90.2	66.7	42.2	29.3	23.2	155.08097	5-6			
7	-18.406	-20.616	1670.81631	-37.6	12.0	-82.2	53.8	78.68697	0.799	-95.7	68.4	42.5	37.7	22.0	172.58926	6-7			
8	-18.391	-26.332	1616.51173	-22.6	7.8	-79.5	63.4	76.46345	0.854	-95.2	63.1	47.8	31.8	10.4	164.27302	7-8			
9	-18.481	-31.654	1595.49681	-3.6	3.6	-76.9	74.4	75.09047	0.881	-94.8	58.2	53.2	29.2	-0.4	152.93992	8-9			
10	-13.118	-31.746	1530.06818	-5.6	3.1	-78.4	69.4	72.37194	0.953	-90.2	56.8	53.0	18.4	1.8	162.64676	9-10			
11	-8.236	-32.191	1496.45844	-12.5	2.7	-80.3	62.3	70.47592	0.999	-85.6	55.9	53.2	8.1	2.3	148.05894	10-11			
12	-4.476	-36.907	1496.29156	95.3	1.3	-81.9	73.6	67.21164	0.977	-82.2	50.8	58.9	8.0	-8.0	137.03657	12-13			
13	-4.212	-32.378	1488.83095	-113.1	2.5	-82.3	53.0	67.98845	0.981	-81.6	55.3	53.7	1.9	1.6	137.03657	12-13			
14	-3.910	-27.733	1505.40718	-93.7	3.6	-82.4	37.6	70.39291	0.995	-80.9	59.9	48.4	11.8	11.5	140.61920	13-14			
15	-3.556	-22.821	1548.68340	-92.0	4.6	-82.3	27.6	72.04158	0.946	-80.1	64.8	43.1	22.0	21.6	148.85567	14-15			
16	-9.131	-17.423	1623.95650	-91.4	5.4	-81.9	20.5	74.47242	0.870	-79.0	70.1	37.9	32.7	32.1	163.74589	15-16			
17	-7.444	-16.822	1635.97520	-75.8	8.0	-82.3	29.5	75.90593	0.847	-84.2	71.0	37.1	34.0	33.8	131.83579	16-17			
18	-12.698	-15.772	1680.72610	-60.3	11.4	-83.2	38.3	78.38624	0.795	-90.3	72.4	36.8	38.6	34.6	162.25259	17-18			
19	-18.562	-14.128	1767.66281	-48.4	16.2	-85.3	45.6	82.12185	0.709	-96.3	74.6	37.2	46.1	34.3	183.98394	18-19			
20	-25.623	-11.320	1919.02058	-39.7	23.7	-89.5	51.6	88.02929	0.575	-102.2	78.0	38.2	56.3	33.6	227.89185	19-20			
21	-25.000	-18.945	1796.38371	-29.6	17.3	-84.1	59.6	83.47470	0.681	-101.1	71.1	43.3	48.2	19.3	209.58827	20-21			
22	-24.728	-25.383	1729.72736	-17.1	10.9	-80.0	68.5	80.69028	0.744	-100.2	65.3	48.6	43.0	6.8	177.10989	21-22			
23	-24.686	-31.268	1703.30533	-2.7	4.5	-76.4	78.3	79.03711	0.775	-99.4	60.1	53.8	40.7	-4.8	161.92929	22-23			
24	-24.835	-36.951	1711.02605	12.1	-2.1	-72.6	88.8	78.26859	0.777	-98.7	55.3	59.0	41.4	-15.9	156.37435	23-24			
25	-18.662	-36.822	1603.68765	16.2	-0.8	-74.1	86.6	74.41154	0.883	-94.5	53.5	58.5	30.2	-11.1	187.01311	24-25			
26	-13.328	-36.795	1538.31566	24.4	0.1	-76.4	83.9	71.75331	0.956	-90.2	52.2	58.4	20.1	-8.5	161.54901	25-26			
27	-8.474	-36.833	1504.41968	45.7	0.8	-79.2	77.4	69.75268	0.998	-85.9	51.3	58.5	11.4	-7.7	147.02997	26-27			
28	-4.476	-36.907	1496.29156	95.3	1.3	-81.9	73.6	67.21164	0.977	-82.2	50.8	58.9	8.0	-8.0	121.11601	27-28			

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TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				693.685		1478.31781		-4.628		-33.125		3213.773		2.059		-72.765		116.690	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.611	-18.526	1618.57352	-17.6	6.8	-78.8	65.6	74.21948	0.897	-93.4	69.6	39.0	33.3	29.8	0.	0-1			
2	-12.936	-26.907	1538.25992	-33.2	6.0	-80.1	56.8	73.10475	0.927	-90.2	61.6	47.6	22.0	12.4	251.24913	1-2			
3	-8.261	-32.096	1486.47513	-13.2	2.7	-80.3	62.0	70.00579	0.999	-85.6	56.0	53.2	8.2	2.4	209.54941	2-3			
4	-8.016	-27.366	1503.49420	-55.8	4.6	-81.2	48.1	71.11813	0.973	-85.2	60.6	47.8	14.3	12.6	142.03459	3-4			
5	-7.756	-22.352	1547.96779	-69.7	6.3	-81.8	37.6	72.85492	0.924	-84.8	65.5	42.4	23.7	23.0	150.62259	4-5			
6	-12.795	-21.641	1586.07045	-50.3	8.7	-81.6	46.7	75.01978	0.876	-90.2	66.7	42.1	29.3	23.2	154.10336	5-6			
7	-18.365	-20.591	1660.11235	-37.7	12.0	-82.2	53.7	78.18293	0.799	-95.7	68.5	42.5	37.7	22.1	171.46629	6-7			
8	-18.349	-26.271	1605.98471	-22.8	7.9	-79.6	63.3	75.96540	0.854	-95.2	63.1	47.8	31.8	10.7	163.26881	7-8			
9	-18.437	-31.557	1584.84825	-3.8	3.6	-77.0	74.2	74.58907	0.881	-94.8	58.2	53.2	29.1	-0.3	151.96690	8-9			
10	-13.111	-31.853	1519.90885	-5.9	3.1	-78.4	69.2	71.89131	0.953	-90.2	56.9	53.0	18.4	1.9	161.54229	9-10			
11	-8.261	-32.096	1486.47513	-13.2	2.7	-80.3	62.0	70.00579	0.999	-85.6	56.0	53.2	8.2	2.4	147.08321	10-11			
12	-4.527	-36.781	1485.92984	94.9	1.3	-81.9	73.0	66.72382	0.977	-82.2	51.0	58.8	7.9	-7.9	180.73340	11-12			
13	-4.264	-32.282	1478.79999	-110.2	2.5	-82.3	52.8	67.53324	0.981	-81.6	55.4	53.6	2.0	1.8	136.08500	12-13			
14	-3.962	-27.668	1495.47881	-93.4	3.7	-82.4	37.7	69.92835	0.994	-80.9	60.0	48.4	11.8	11.6	139.70659	13-14			
15	-3.610	-22.786	1538.62337	-91.8	4.7	-82.3	27.7	71.57301	0.946	-80.1	64.8	43.1	22.1	21.7	147.92500	14-15			
16	-3.187	-17.421	1613.48592	-91.3	5.5	-81.8	20.6	73.99132	0.870	-79.0	70.2	37.9	32.7	32.1	162.72056	15-16			
17	-7.471	-16.822	1625.55907	-75.8	8.0	-82.3	29.6	75.42221	0.847	-84.2	71.0	37.1	34.1	33.8	131.00273	16-17			
18	-12.694	-15.777	1670.08827	-60.3	11.4	-83.2	38.3	77.89011	0.795	-90.3	72.4	36.8	38.6	34.6	161.23907	17-18			
19	-18.520	-14.145	1756.39343	-48.4	16.2	-85.3	45.5	81.59857	0.710	-96.3	74.5	37.2	46.0	34.3	182.77664	18-19			
20	-25.529	-11.367	1906.34732	-39.7	23.6	-89.5	51.6	87.44826	0.576	-102.3	77.9	38.2	56.2	33.6	226.13016	19-20			
21	-24.911	-18.934	1784.60620	-29.7	17.3	-84.1	59.5	82.92730	0.682	-101.1	71.1	43.3	48.2	19.4	208.15541	20-21			
22	-24.639	-25.327	1718.23595	-17.2	10.9	-80.1	68.3	80.15378	0.745	-100.2	65.3	48.6	43.0	6.9	175.99806	21-22			
23	-24.596	-31.170	1691.69931	-2.8	4.6	-76.5	78.0	78.49786	0.776	-99.4	60.2	53.8	40.7	-4.6	160.88696	22-23			
24	-24.739	-36.809	1698.93665	11.9	-2.0	-72.8	88.5	77.71471	0.778	-98.7	55.3	59.0	41.3	-15.7	155.26777	23-24			
25	-18.614	-36.688	1592.63039	16.0	-0.7	-74.2	86.2	73.89814	0.884	-94.5	53.6	58.5	30.1	-10.9	185.54388	24-25			
26	-13.319	-36.666	1527.78703	24.0	0.1	-76.4	83.5	71.26221	0.956	-90.2	52.3	58.3	20.0	-8.4	160.40623	25-26			
27	-8.498	-36.706	1494.09334	45.1	0.8	-79.2	77.4	69.25627	0.998	-85.9	51.5	58.5	11.4	-7.5	146.02856	26-27			
28	-4.527	-36.781	1485.92984	94.9	1.3	-81.9	73.0	66.72382	0.977	-82.2	51.0	58.8	7.9	-7.9	120.28686	27-28			

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TAB NO 65

ATLAS PHOTO NO 65

POD SEQUENCE NO 136

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
				688.565		1468.24454	-4.653	-33.075	3203.700	2.061	-72.728	116.683			
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.602	-18.545	1607.67998	-17.8	6.8	-78.8	65.4	73.73112	0.897	-93.4	69.6	39.0	33.2	29.7	0
2	-12.930	-26.846	1528.18616	-33.3	6.0	-80.1	56.7	72.62600	0.927	-90.2	61.7	47.6	22.0	12.5	248.93498
3	-8.286	-32.003	1476.48152	-13.8	2.8	-80.3	61.7	69.53518	0.999	-85.6	56.1	53.2	8.2	2.5	208.22263
4	-8.042	-27.303	1493.59358	-55.8	4.6	-81.2	48.0	70.64973	0.973	-85.2	60.7	47.8	14.4	12.6	141.11383
5	-7.784	-22.321	1537.91980	-69.7	6.4	-81.8	37.6	72.38177	0.924	-84.8	65.6	42.4	23.7	23.0	149.67964
6	-12.791	-21.613	1575.83673	-50.3	8.7	-81.6	46.6	74.53573	0.876	-90.2	66.7	42.1	29.3	23.3	153.12048
7	-18.324	-20.570	1649.35297	-37.8	12.0	-82.2	53.7	77.67627	0.799	-95.7	68.5	42.5	37.7	22.1	170.33638
8	-18.307	-26.212	1595.42572	-22.9	7.9	-79.6	63.1	75.46585	0.854	-95.2	63.2	47.8	31.8	10.7	162.25306
9	-18.393	-31.464	1574.18825	-4.0	3.7	-77.1	73.9	74.08714	0.882	-94.8	58.3	53.2	29.1	-0.2	150.98943
10	-13.103	-31.760	1509.73416	-6.2	3.1	-78.4	68.9	71.41014	0.953	-90.2	57.0	53.0	18.4	2.0	160.43698
11	-8.286	-32.003	1476.48152	-13.8	2.8	-80.3	61.7	69.53518	0.999	-85.6	56.1	53.2	8.2	2.5	146.10626
12	-4.578	-36.656	1475.57593	94.5	1.3	-81.9	72.4	66.23797	0.976	-82.2	51.1	58.8	7.8	-7.8	179.49651
13	-4.316	-32.189	1468.76010	-107.7	2.6	-82.2	52.6	67.07768	0.981	-81.6	55.5	53.6	2.1	1.9	135.13480
14	-4.015	-27.605	1485.52518	-93.0	3.7	-82.4	37.7	69.46264	0.994	-80.9	60.0	48.4	11.9	11.7	138.79075
15	-3.665	-22.754	1528.52028	-91.7	4.7	-82.3	27.8	71.10249	0.945	-80.1	64.9	43.1	22.1	21.7	146.98619
16	-3.245	-17.423	1602.94933	-91.1	5.5	-81.8	20.8	70.50729	0.870	-79.0	70.2	37.9	32.7	32.1	161.68042
17	-7.501	-16.825	1615.07324	-75.7	8.0	-82.2	29.7	74.93529	0.847	-84.2	71.0	37.1	34.1	33.8	130.16405
18	-12.690	-15.785	1659.37418	-60.3	11.4	-83.2	38.3	77.39052	0.795	-90.3	72.4	36.8	38.6	34.6	160.21721
19	-18.478	-14.166	1745.03671	-48.5	16.1	-85.3	45.5	81.07120	0.710	-96.3	74.5	37.2	46.0	34.3	181.55737
20	-25.434	-11.419	1893.56763	-39.8	23.5	-89.5	51.5	86.86232	0.578	-102.3	77.9	38.2	56.1	33.5	224.34964
21	-24.822	-18.927	1772.76491	-29.8	17.2	-84.1	59.4	82.37695	0.683	-101.1	71.0	43.3	48.1	19.4	206.69141
22	-24.221	-25.275	1702.71017	-17.3	10.9	-80.1	68.1	79.61571	0.746	-100.2	65.3	48.5	42.9	7.0	174.87096
23	-24.505	-31.075	1680.08421	-3.0	4.6	-76.6	77.8	77.95847	0.777	-97.4	50.2	53.8	40.4	-4.5	159.83899
24	-24.644	-36.670	1686.86476	11.8	-1.9	-72.9	88.2	77.16174	0.780	-98.7	55.4	59.0	41.2	-15.6	154.16397
25	-18.567	-36.558	1581.58276	15.8	-0.6	-74.3	85.9	73.38521	0.885	-94.5	53.7	58.5	30.1	-10.8	184.08060
26	-13.309	-36.539	1517.26553	23.7	0.2	-76.5	83.1	70.77144	0.957	-90.2	52.5	58.3	20.0	-8.2	159.26524
27	-8.521	-36.582	1483.77385	44.5	0.8	-79.2	76.9	68.76173	0.997	-85.9	51.6	58.5	11.3	-7.4	145.02777
28	-4.578	-36.656	1475.57593	94.5	1.3	-81.9	72.4	66.23797	0.976	-82.2	51.1	58.8	7.8	-7.8	119.45829

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TAB NO 66

ATLAS PHOTO NO 66

POD SEQUENCE NO 138

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				683.445			1458.16187	-4.679	-33.025	3193.617	2.064	-72.690	116.677			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.592	-18.564	1596.77467	-18.0	6.8	-78.9	65.2	73.24221	0.897	-93.4	69.6	39.1	33.2	29.7	0	0
2	-12.925	-26.785	1518.10028	-33.5	6.0	-80.1	56.5	72.14668	0.927	-90.2	61.8	47.6	22.1	12.5	246.62444	1
3	-8.310	-31.911	1466.47993	-14.4	2.8	-80.3	61.5	69.06419	0.999	-85.6	56.2	53.2	8.3	2.6	206.89376	2
4	-8.068	-27.241	1483.68204	-55.8	4.6	-81.2	47.9	70.18081	0.973	-85.2	60.7	47.8	14.5	12.7	140.19216	3
5	-7.811	-22.290	1527.85844	-69.6	6.4	-81.8	37.6	71.90801	0.923	-84.8	65.6	42.4	23.8	23.0	148.73503	4
6	-12.786	-21.585	1565.58821	-50.4	8.7	-81.7	46.5	74.05097	0.876	-90.3	66.8	42.4	37.7	22.1	152.13604	5
7	-18.282	-20.548	1638.57809	-37.9	12.0	-82.2	53.6	77.16887	0.799	-95.7	68.5	42.4	37.7	22.1	169.20470	6
8	-18.265	-26.154	1584.85431	-23.1	7.9	-79.7	63.0	74.96572	0.854	-95.2	63.2	47.8	31.8	10.8	161.23520	7
9	-18.348	-31.370	1563.51952	-4.2	3.7	-77.2	73.7	73.58481	0.882	-94.8	58.4	53.2	29.1	-0.0	150.01087	8
10	-13.096	-31.667	1499.55261	-6.6	3.1	-78.5	68.6	70.92855	0.953	-90.2	57.1	53.0	18.4	2.1	159.33083	9
11	-8.310	-31.911	1466.47993	-14.4	2.8	-80.3	61.5	69.06419	0.999	-85.6	56.2	53.2	8.3	2.6	145.12827	10
12	-4.629	-36.532	1465.21947	94.2	1.3	-81.8	71.8	65.75273	0.976	-82.2	51.2	58.8	7.6	-7.6	178.25979	11
13	-4.367	-32.096	1458.71375	-105.3	2.6	-82.2	52.4	66.62203	0.981	-81.6	55.6	53.6	2.1	2.0	134.18494	12
14	-4.068	-27.542	1475.56216	-92.7	3.7	-82.3	37.7	68.99649	0.994	-80.9	60.1	48.3	12.0	11.7	137.87411	13
15	-3.720	-22.722	1518.40540	-91.5	4.7	-82.2	28.0	70.63142	0.945	-80.1	64.9	43.1	22.1	21.7	146.04585	14
16	-3.302	-17.425	1592.39911	-91.0	5.6	-81.8	20.9	73.02264	0.870	-79.0	70.2	37.9	32.7	32.1	160.63838	15
17	-7.530	-16.828	1604.57187	-75.6	8.0	-82.2	29.7	74.44766	0.847	-84.2	71.0	37.1	34.1	33.8	129.32412	16
18	-12.686	-15.794	1648.64288	-60.3	11.4	-83.2	38.3	76.88993	0.795	-90.3	72.4	36.8	38.6	34.6	159.19332	17
19	-18.435	-14.187	1733.66219	-48.5	16.1	-85.3	45.5	80.54300	0.711	-96.3	74.5	37.2	46.0	34.3	180.33638	18
20	-25.338	-11.471	1880.77454	-39.8	23.4	-89.5	51.4	86.27575	0.579	-102.3	77.8	38.2	56.0	33.5	222.57155	19
21	-24.732	-18.920	1760.91000	-29.8	17.1	-84.1	59.3	81.82596	0.684	-101.1	71.0	43.3	48.0	19.4	205.22655	20
22	-24.463	-25.222	1695.17378	-17.4	10.9	-80.2	68.0	79.07715	0.747	-100.2	65.4	48.5	42.8	7.1	173.74185	21
23	-24.415	-30.980	1668.46317	-3.1	4.7	-76.7	77.6	77.41841	0.778	-99.4	60.3	53.8	40.5	-4.3	158.78992	22
24	-24.548	-36.531	1674.79413	11.6	-1.8	-73.0	87.9	76.60883	0.781	-98.7	55.5	59.0	41.1	-15.4	153.06136	23
25	-18.520	-36.427	1570.53157	15.5	-0.6	-74.4	85.6	72.87213	0.885	-94.5	53.8	58.5	30.0	-10.6	182.62033	24
26	-13.299	-36.413	1506.73941	23.3	0.2	-76.5	82.7	70.28046	0.957	-90.2	52.6	58.3	19.9	-8.1	158.12424	25
27	-8.545	-36.457	1473.45032	43.9	0.8	-79.2	76.4	68.26761	0.997	-85.9	51.7	58.5	11.2	-7.3	144.02669	26
28	-4.629	-36.532	1465.21947	94.2	1.3	-81.8	71.8	65.75273	0.976	-82.2	51.2	58.8	7.6	-7.6	118.62931	27

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JULY 31, 1964 13 HR 14 MIN 30 SEC 474 MS TAB NO 67 ATLAS PHOTO NO 67 POD SEQUENCE NO 140

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LUN	R	V	PTH	AZ					
				678.325	1448.06970	-4.704	-32.974	3183.525	2.066	-72.653	116.670					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.583	-18.583	1585.85742	-18.1	6.8	-78.9	65.0	72.75261	0.897	-93.4	69.6	39.1	33.2	29.7	0.	0-1
2	-12.919	-26.725	1507.99831	-33.6	6.0	-80.2	56.4	71.66659	0.926	-90.2	61.8	47.6	22.1	12.6	244.33486	1-2
3	-8.335	-31.819	1456.46962	-15.0	2.8	-80.3	61.2	68.59279	0.998	-85.6	56.2	53.2	8.3	2.7	205.56186	2-3
4	-8.094	-27.179	1473.75580	-55.9	4.7	-81.1	47.8	69.71120	0.972	-85.2	60.8	47.8	14.6	12.8	139.26896	3-4
5	-7.839	-22.259	1517.77637	-69.6	6.4	-81.8	37.7	71.43327	0.923	-84.8	65.6	42.4	23.8	23.1	147.78716	4-5
6	-12.781	-21.558	1555.31703	-50.4	8.8	-81.7	46.5	73.56515	0.875	-90.3	66.8	42.1	29.4	23.3	151.14911	5-6
7	-18.241	-20.528	1627.71882	-37.9	12.0	-82.3	53.5	76.66033	0.799	-95.7	68.5	42.4	37.6	22.2	168.07052	6-7
8	-18.223	-26.097	1574.26587	-23.2	7.9	-79.7	62.8	74.46478	0.854	-95.2	63.3	47.8	31.8	10.9	160.21317	7-8
9	-18.304	-31.278	1552.84114	-4.4	3.7	-77.7	73.5	73.08204	0.862	-94.8	58.5	53.2	29.1	0.1	149.03037	8-9
10	-13.088	-31.575	1489.36137	-6.9	3.2	-78.5	68.4	70.44650	0.953	-90.2	57.2	53.0	18.4	2.2	158.22395	9-10
11	-8.335	-31.819	1456.46962	-15.0	2.8	-80.3	61.2	68.59279	0.998	-85.6	56.2	53.2	8.3	2.7	144.14940	10-11
12	-4.679	-36.409	1454.86227	93.8	1.3	-81.8	71.2	65.26833	0.976	-82.2	51.3	58.8	7.5	-7.5	177.02312	11-12
13	-4.419	-32.004	1448.66005	-103.1	2.6	-82.2	52.2	66.16621	0.981	-81.6	55.7	53.6	2.2	2.1	133.23553	12-13
14	-4.121	-27.480	1465.58606	-92.4	3.7	-82.3	37.7	68.52974	0.994	-80.9	60.2	48.3	12.0	11.8	136.95614	13-14
15	-3.774	-22.690	1508.27174	-91.3	4.7	-82.2	28.1	70.15950	0.945	-80.1	64.9	43.1	22.2	21.8	145.10252	14-15
16	-3.359	-17.428	1581.82381	-90.9	5.6	-81.8	21.0	73.95887	0.870	-79.0	70.2	37.9	32.7	32.1	159.59168	15-16
17	-7.559	-16.833	1594.04300	-75.6	8.0	-82.2	29.8	73.95877	0.867	-84.2	71.0	37.1	34.1	33.8	128.48201	16-17
18	-12.682	-15.804	1637.88138	-60.3	11.4	-83.2	38.3	76.38804	0.795	-90.3	72.4	36.8	18.6	34.6	158.16628	17-18
19	-18.392	-14.210	1722.25468	-46.5	16.1	-85.3	45.4	80.01326	0.711	-96.3	74.5	37.2	45.9	34.3	179.11151	18-19
20	-25.243	-11.524	1867.94777	-39.9	23.3	-89.4	51.4	85.68763	0.581	-102.3	77.7	38.2	55.9	33.4	220.79108	19-20
21	-24.642	-18.914	1749.03029	-29.9	17.1	-84.2	59.2	81.27382	0.685	-101.1	71.0	43.3	48.0	19.5	203.75444	20-21
22	-24.374	-25.170	1683.62128	-17.6	10.9	-80.3	67.8	75.53785	0.747	-100.2	65.4	48.5	42.8	7.2	172.60777	21-22
23	-24.324	-30.887	1656.83510	-3.3	4.7	-76.8	77.4	76.87824	0.779	-99.4	60.3	53.8	40.4	-4.2	157.73871	22-23
24	-24.453	-36.394	1662.72762	11.4	-1.7	-73.2	87.6	76.05614	0.782	-98.7	55.6	59.0	41.0	-15.2	151.96011	23-24
25	-18.472	-36.297	1559.47920	15.3	-0.5	-74.5	85.2	72.35900	0.886	-94.5	53.9	58.5	29.9	-10.5	181.16340	24-25
26	-13.290	-36.288	1496.21086	23.0	0.3	-76.6	82.3	69.78936	0.957	-90.2	52.7	58.3	19.9	-8.0	156.98375	25-26
27	-8.568	-36.334	1463.12479	43.3	0.9	-79.2	75.9	67.77419	0.997	-85.9	51.9	58.5	11.2	-7.1	143.02521	26-27
28	-4.679	-36.409	1454.86227	93.8	1.3	-81.8	71.2	65.26833	0.976	-82.2	51.3	58.8	7.5	-7.5	117.80033	27-28

JULY 31, 1964 13 HR 14 MIN 35 SEC 594 MS TAB NO 68 ATLAS PHOTO NO 68 POD SEQUENCE NO 142

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LUN	R	V	PTH	AZ					
				673.205	1437.96799	-4.730	-32.923	3173.423	2.068	-72.615	116.664					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.574	-18.603	1574.92819	-18.3	6.8	-79.0	64.9	72.26218	0.897	-93.4	69.5	39.1	33.1	29.6	0.	0-1
2	-12.912	-26.666	1497.87621	-33.7	6.0	-80.2	56.3	71.18554	0.926	-90.2	61.9	47.6	22.2	12.7	242.08406	1-2
3	-8.360	-31.728	1446.44474	-15.5	2.8	-80.3	60.9	68.12094	0.998	-85.6	56.3	53.2	8.4	2.8	204.22575	2-3
4	-8.121	-27.119	1463.81111	-55.9	4.7	-81.1	47.7	69.24072	0.972	-85.2	60.9	47.8	14.6	12.8	138.34362	3-4
5	-7.867	-22.231	1507.66641	-69.5	6.4	-81.8	37.7	70.95724	0.923	-84.8	65.6	42.4	23.9	23.1	146.83454	4-5
6	-12.776	-21.532	1545.01544	-50.4	8.8	-81.7	46.4	73.07790	0.875	-90.3	66.8	42.1	29.4	23.4	150.15891	5-6
7	-18.199	-20.509	1616.94624	-38.0	12.0	-82.3	53.4	76.15022	0.799	-95.7	68.5	42.4	37.6	22.2	166.93215	6-7
8	-18.180	-26.041	1563.65596	-23.3	7.9	-79.8	62.6	73.96283	0.854	-95.2	63.3	47.8	31.8	11.0	159.18488	7-8
9	-18.260	-31.186	1542.15218	-4.6	3.8	-77.3	73.2	72.57878	0.882	-94.8	58.6	53.2	29.0	0.2	148.04719	8-9
10	-13.081	-31.484	1479.15955	-7.2	3.2	-78.6	68.1	69.96395	0.953	-90.2	57.3	53.0	18.4	2.3	157.11609	9-10
11	-8.360	-31.728	1446.44474	-15.5	2.8	-80.3	60.9	68.12094	0.998	-85.6	56.3	53.2	8.4	2.8	143.16940	10-11
12	-4.730	-36.287	1444.50630	93.4	1.4	-81.8	70.6	64.78503	0.976	-82.2	51.5	58.8	7.4	-7.4	175.78656	11-12
13	-4.471	-31.913	1438.59824	-101.0	2.6	-82.1	52.1	65.11013	0.981	-81.6	55.8	53.6	2.3	2.2	132.28673	12-13
14	-4.174	-27.419	1455.59315	-92.1	3.7	-82.3	37.7	68.06221	0.993	-80.9	60.2	48.3	12.1	11.9	136.03618	13-14
15	-3.824	-22.660	1498.11223	-91.2	4.8	-82.2	28.2	69.68640	0.945	-80.0	65.0	43.1	22.2	21.8	144.15476	14-15
16	-3.416	-17.432	1571.21182	-90.8	5.6	-81.7	21.2	72.04946	0.870	-79.0	70.2	37.9	32.7	32.1	158.53749	15-16
17	-7.588	-16.839	1583.47475	-75.5	8.1	-82.2	29.9	73.46808	0.847	-84.2	71.0	37.1	34.1	33.8	127.83669	16-17
18	-12.678	-15.816	1627.07666	-60.3	11.4	-83.2	38.3	75.88413	0.795	-90.3	72.4	36.8	18.6	34.6	157.13439	17-18
19	-18.349	-14.235	1710.79900	-48.5	16.0	-85.3	45.4	79.48128	0.711	-96.3	74.4	37.2	45.9	34.3	177.88059	18-19
20	-25.147	-11.579	1855.06760	-39.9	23.2	-89.4	51.3	85.09704	0.582	-102.3	77.7	38.1	55.8	33.4	219.00433	19-20
21	-24.553	-18.910	1737.11491	-30.0	17.0	-84.2	59.1	80.72003	0.685	-101.1	71.0	43.3	47.9	19.5	202.26875	20-21
22	-24.285	-25.120	1672.04729	-17.7	10.9	-80.3	67.7	77.99758	0.748	-100.2	65.4	48.5	42.7	7.3	171.46589	21-22
23	-24.233	-30.795	1645.19888	-3.4	4.7	-76.8	77.2	76.33774	0.780	-99.4	60.4	53.8	40.3	-4.1	156.68424	22-23
24	-24.358	-36.258	1650.66823	11.2	-1.6	-73.3	87.4	75.50383	0.784	-98.7	55.7	59.0	40.8	-15.0	150.86041	23-24
25	-18.425	-36.169	1548.42812	15.1	-0.5	-74.6	84.9	71.84546	0.887	-94.5	54.0	58.5	29.9	-10.3	179.71042	24-25
26	-13.280	-36.163	1485.68199	22.6	0.3	-76.7	81.9	69.29825	0.958	-90.2	52.8	58.3	19.8	-7.8	155.84406	25-26
27	-8.591	-36.211	1452.79919	42.7	0.9	-79.2	75.4	67.28171	0.997	-85.9	52.0	58.5	11.1	-7.0	142.02363	26-27
28	-4.730	-36.287	1444.50630	93.4	1.4	-81.8	70.6	64.78503	0.976	-82.2	51.5	58.8	7.4	-7.4	116.97135	27-28

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JULY 31, 1964 13 HR 14 MIN 40 SEC 714 MS

TAB NO 69

ATLAS PHOTO NO 69

POD SEQUENCE NO 144

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				668.085	1427.85703	-4.755	-32.872	3163.312	2.071	-72.577	116.657					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.565	-18.622	1563.98732	-18.5	6.8	-79.0	64.7	71.77120	0.897	-93.4	69.5	39.1	33.1	29.6	0.	0-1
2	-12.906	-26.607	1487.74197	-33.9	6.0	-80.2	56.1	70.70392	0.926	-90.2	61.9	47.5	22.2	12.7	239.83654	1-2
3	-8.385	-31.637	1436.42175	-16.1	2.8	-80.3	60.7	67.64870	0.998	-85.6	56.4	53.2	8.5	2.9	202.88755	2-3
4	-8.147	-27.059	1453.85547	-55.9	4.7	-81.1	47.7	68.76972	0.972	-85.2	60.9	47.8	14.7	12.9	137.41733	3-4
5	-7.894	-22.202	1497.54314	-69.5	6.4	-81.7	37.7	70.48058	0.923	-84.8	65.7	42.4	23.9	23.2	145.88019	4-5
6	-12.771	-21.506	1534.69917	-50.5	8.8	-81.7	46.4	72.58994	0.875	-90.3	66.8	42.1	29.4	23.4	149.16706	5-6
7	-18.156	-20.490	1606.09850	-38.1	12.0	-82.3	53.3	75.63938	0.799	-95.7	68.5	42.4	37.6	22.2	165.79251	6-7
8	-18.138	-25.985	1553.03362	-23.5	7.9	-79.8	62.5	73.46029	0.854	-95.3	63.4	47.8	31.8	11.0	158.15456	7-8
9	-18.215	-31.095	1531.45435	-4.8	3.8	-77.4	73.0	72.07510	0.883	-94.8	58.6	53.2	29.0	0.3	147.06282	8-9
10	-13.073	-31.393	1468.94872	-7.4	3.2	-78.6	67.9	69.48098	0.953	-90.2	57.3	53.0	18.4	2.4	156.00766	9-10
11	-8.385	-31.637	1436.42175	-16.1	2.8	-80.3	60.7	67.64870	0.998	-85.6	56.4	53.2	8.5	2.9	142.18826	10-11
12	-4.781	-36.165	1434.14742	-92.9	1.4	-81.7	70.1	64.30226	0.975	-82.2	51.6	58.8	7.3	-7.2	174.55005	11-12
13	-4.522	-31.822	1428.52980	-99.1	2.6	-82.1	51.9	65.25393	0.981	-81.6	55.9	53.6	2.4	-7.3	131.33817	12-13
14	-4.227	-27.358	1445.59084	-91.8	3.8	-82.2	37.8	67.59625	0.993	-80.9	60.3	48.3	12.2	12.0	135.11539	13-14
15	-3.884	-22.630	1487.94109	-91.0	4.8	-82.1	28.3	69.21277	0.945	-80.0	65.0	43.1	22.2	21.9	143.20550	14-15
16	-3.473	-17.437	1560.58664	-90.7	5.7	-81.7	21.3	71.56145	0.870	-79.0	70.2	37.9	32.7	32.1	157.48157	15-16
17	-7.618	-16.845	1572.89133	-75.5	8.1	-82.2	29.9	72.97668	0.847	-84.2	71.0	37.1	34.1	33.8	126.79021	16-17
18	-12.673	-15.828	1616.25522	-60.3	11.4	-83.2	38.3	75.37944	0.795	-90.3	72.3	36.8	38.6	34.6	156.10066	17-18
19	-18.306	-14.259	1699.32619	-48.6	16.0	-85.3	45.4	78.94849	0.712	-96.3	74.4	37.1	45.9	34.2	176.64812	18-19
20	-25.051	-11.634	1842.17500	-39.9	23.1	-89.4	51.3	84.50588	0.583	-102.3	77.6	38.1	55.7	33.3	217.22010	19-20
21	-24.463	-18.906	1725.18639	-30.1	17.0	-84.2	59.0	80.15652	0.686	-101.1	71.0	43.3	47.8	19.5	200.78269	20-21
22	-24.196	-25.071	1660.46283	-17.8	10.9	-80.4	67.4	77.55521	0.749	-100.2	65.5	48.5	42.7	7.4	170.32207	21-22
23	-24.143	-30.703	1633.55661	-3.6	4.8	-76.9	76.9	75.79695	0.780	-99.4	60.5	53.8	40.3	-3.9	155.66876	22-23
24	-24.262	-36.122	1638.60954	11.1	-1.5	-73.4	87.1	74.95155	0.785	-98.7	55.9	59.0	40.2	-14.8	149.76169	23-24
25	-18.378	-36.041	1537.37308	14.8	-0.4	-74.7	84.6	71.33273	0.887	-94.5	54.1	58.5	29.8	-10.2	178.26038	24-25
26	-13.270	-36.039	1475.14824	22.3	0.3	-76.7	81.5	68.80691	0.958	-90.2	52.9	58.3	19.8	-7.7	154.70427	25-26
27	-8.614	-36.089	1442.46935	42.1	0.9	-79.3	75.0	66.78958	0.997	-85.9	52.1	58.4	11.0	-6.9	141.02156	26-27
28	-4.781	-36.165	1434.14742	92.9	1.4	-81.7	70.1	64.30226	0.975	-82.2	51.6	58.8	7.3	-7.2	116.14205	27-28

JULY 31, 1964 13 HR 14 MIN 45 SEC 834 MS

TAB NO 70

ATLAS PHOTO NO 70

POD SEQUENCE NO 146

TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA					662.965		1417.73636	-4.781	-32.820	3153.192	2.073	-72.539	116.650			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.555	-18.641	1553.03426	-18.7	6.8	-79.1	64.5	71.27963	0.897	-93.4	69.5	39.1	33.0	29.6	0.	0-
2	-12.900	-26.549	1477.59509	-34.0	6.0	-80.2	56.0	70.22170	0.926	-90.2	62.0	47.5	22.2	12.8	237.59204	1-2
3	-8.409	-31.546	1426.38512	-16.6	2.9	-80.3	60.5	67.17605	0.998	-85.6	56.5	53.1	8.5	3.0	201.54730	2-3
4	-8.173	-26.999	1443.88838	-56.0	4.7	-81.1	47.6	68.29819	0.971	-85.2	61.0	47.8	14.8	13.0	136.48999	3-4
5	-7.922	-22.173	1487.40607	-69.4	6.5	-81.7	37.7	70.00328	0.922	-84.8	65.7	42.4	23.9	23.2	144.92414	4-5
6	-12.766	-21.481	1524.36768	-50.5	8.8	-81.7	46.3	72.10126	0.875	-90.3	66.9	42.1	29.5	23.4	148.17346	5-6
7	-18.114	-20.472	1595.23486	-38.2	12.0	-82.3	53.2	75.12781	0.799	-95.8	68.5	42.4	37.6	22.3	164.65130	6-7
8	-18.095	-25.929	1542.39822	-23.6	7.9	-79.9	62.3	72.95714	0.854	-95.3	63.4	47.8	31.8	11.1	157.12213	7-8
9	-18.171	-31.004	1520.74699	-5.0	3.8	-77.4	72.7	71.57098	0.883	-94.8	58.7	53.2	29.0	0.4	146.07724	8-9
10	-13.065	-31.302	1458.72830	-7.7	3.2	-78.6	67.6	68.99755	0.953	-90.2	57.4	53.0	18.4	2.5	154.89837	9-10
11	-8.409	-31.546	1426.38512	-16.6	2.9	-80.3	60.5	67.17605	0.998	-85.6	56.5	53.1	8.5	3.0	141.20617	10-11
12	-4.831	-36.042	1423.78503	-92.5	1.4	-81.7	69.6	63.81998	0.975	-82.2	51.7	58.8	7.1	-7.1	173.31341	11-12
13	-4.574	-31.731	1418.45415	-97.4	2.6	-82.1	51.8	64.79759	0.981	-81.6	56.0	53.6	2.5	-7.4	130.38972	12-13
14	-4.280	-27.297	1435.57858	-91.5	3.8	-82.2	37.8	67.12582	0.993	-80.9	60.4	48.3	12.2	12.0	134.19370	13-14
15	-3.939	-22.601	1477.75781	-90.8	4.8	-82.1	28.4	68.73858	0.944	-80.0	65.0	43.0	22.3	21.9	142.25475	14-15
16	-3.531	-17.442	1549.94771	-90.6	5.7	-81.7	21.4	71.07283	0.870	-79.0	70.1	37.9	32.7	32.1	156.42387	15-16
17	-7.647	-16.852	1562.29218	-75.4	8.1	-82.2	30.0	72.48457	0.847	-84.2	71.0	37.1	34.1	33.8	125.94257	16-17
18	-12.669	-15.840	1605.41641	-60.3	11.4	-83.2	38.3	74.87395	0.795	-90.3	72.3	36.8	38.6	34.6	155.06500	17-18
19	-18.263	-14.285	1687.83554	-48.6	16.0	-85.3	45.3	78.41487	0.712	-96.4	74.4	37.1	45.8	34.2	175.41398	18-19
20	-24.954	-11.690	1829.26936	-40.0	23.0	-89.3	51.2	83.91411	0.585	-102.3	77.6	38.1	55.6	33.2	215.43855	19-20
21	-24.372	-18.902	1713.24391	-30.2	16.9	-84.2	58.9	79.61057	0.687	-101.1	71.0	43.3	47.8	19.5	199.29624	20-21
22	-24.107	-25.021	1648.86713	-17.9	10.9	-80.4	67.4	76.91553	0.749	-100.2	65.5	48.5	42.6	7.4	169.17201	21-22
23	-24.052	-30.611	1621.90741	-3.7	4.8	-77.0	76.7	75.25586	0.781	-99.4	60.5	53.8	40.2	-3.8	154.57203	22-23
24	-24.167	-35.987	1626.55063	10.9	-1.4	-73.5	86.8	74.39928	0.786	-98.7	55.9	59.0	40.6	-14.6	148.66385	23-24
25	-18.330	-35.913	1526.31339	14.6	-0.3	-74.8	84.3	70.81929	0.888	-94.5	54.2	58.5	29.7	-10.0	176.81279	24-25
26	-13.260	-35.915	1464.60895	21.9	0.4	-76.8	81.1	68.31532	0.958	-90.2	53.1	58.3	19.7	-7.6	153.56456	25-26
27	-8.638	-35.966	1432.13652	41.5	0.9	-79.3	74.5	66.29177	0.996	-85.9	52.2	58.4	11.0	-6.7	140.01888	26-27
28	-4.831	-36.042	1423.78503	92.5	1.4	-81.7	69.6	63.81998	0.975	-82.2	51.7	58.8	7.1	-7.1	115.31245	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 14 MIN 50 SEC 954 MS

TAB NO 71 ATLAS PHOTO NO 71 POD SEQUENCE NO 148

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				657.845		1407.60602	-4.807	-32.768	3143.061	2.076	-72.500	116.644				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.546	-18.660	1542.06911	-18.8	6.8	-79.1	64.3	70.78748	0.896	-93.4	69.5	39.1	33.0	29.5	0.	0-1
2	-12.894	-26.440	1467.43552	-34.1	6.1	-80.2	55.9	69.73887	0.925	-90.2	62.0	47.5	22.3	12.9	235.35106	1-2
3	-8.434	-31.455	1416.33987	-17.1	2.9	-80.3	60.2	66.70300	0.998	-85.6	56.6	53.1	8.6	3.1	200.20490	2-3
4	-8.199	-26.939	1433.90977	-56.0	4.7	-81.1	47.5	67.82611	0.971	-85.2	61.0	47.8	14.8	13.0	135.56161	3-4
5	-7.949	-22.145	1477.25513	-69.4	6.5	-81.7	37.7	69.52532	0.922	-84.8	65.7	42.4	24.0	23.2	143.96634	4-5
6	-12.761	-21.456	1514.02089	-50.5	8.8	-81.7	46.3	71.61187	0.874	-90.3	66.9	42.1	29.5	23.5	147.17830	5-6
7	-18.072	-20.453	1584.35533	-38.2	11.9	-82.4	53.2	74.61548	0.799	-95.8	68.5	42.4	37.6	22.3	163.50833	6-7
8	-18.052	-25.874	1531.74977	-23.7	7.9	-79.9	62.2	72.45337	0.854	-95.3	63.5	47.8	31.8	11.2	156.08756	7-8
9	-18.126	-30.913	1510.03020	-5.2	3.9	-77.5	72.5	71.06641	0.883	-95.6	58.8	53.2	28.9	0.5	145.90407	8-9
10	-13.057	-31.211	1448.49832	-8.0	3.3	-78.7	67.4	68.51367	0.953	-90.2	57.5	53.0	18.5	2.6	153.78831	9-10
11	-8.434	-31.455	1416.33987	-17.1	2.9	-80.3	60.2	66.70300	0.998	-85.6	56.6	53.1	8.6	3.1	140.22302	10-11
12	-4.882	-35.920	1413.41922	-92.0	1.4	-81.7	69.1	63.33819	0.975	-82.2	51.8	58.8	7.0	-7.0	172.07666	11-12
13	-4.682	-31.640	1408.37134	-95.7	2.6	-82.0	51.6	64.34111	0.981	-81.6	56.1	53.6	2.5	2.5	129.44143	12-13
14	-4.333	-27.236	1425.55635	-91.2	3.8	-82.2	37.8	66.65691	0.993	-80.9	60.4	48.3	12.3	12.1	133.27114	13-14
15	-3.993	-22.571	1467.56236	-90.7	4.8	-82.1	28.5	68.26383	0.944	-80.0	65.1	43.0	22.3	22.0	141.30241	14-15
16	-3.588	-17.447	1539.29494	-90.5	5.7	-81.7	21.6	70.78359	0.870	-79.0	70.1	37.9	32.7	32.2	155.36439	15-16
17	-7.676	-16.858	1551.67720	-75.4	8.1	-82.2	30.1	71.99173	0.847	-84.2	70.9	37.1	34.1	33.8	125.09356	16-17
18	-12.664	-15.853	1594.56020	-60.3	11.4	-83.2	38.4	74.36764	0.795	-90.3	72.3	36.8	38.6	34.5	154.02752	17-18
19	-18.219	-14.310	1676.32713	-48.6	15.9	-85.3	45.3	77.88043	0.713	-96.4	74.4	37.1	45.8	34.2	174.17830	18-19
20	-24.858	-11.745	1816.35062	-40.0	22.9	-89.3	51.2	83.32173	0.586	-102.3	77.5	38.1	55.5	33.2	213.65945	19-20
21	-24.282	-18.899	1701.28763	-30.2	16.9	-84.2	58.8	79.05488	0.688	-101.1	71.0	43.3	47.7	19.6	197.80928	20-21
22	-24.018	-24.972	1637.26027	-18.0	10.9	-80.5	67.2	76.37373	0.750	-100.2	65.5	48.5	42.6	7.6	168.02835	21-22
23	-23.961	-30.519	1610.25145	-3.9	4.9	-77.1	76.5	74.71446	0.782	-99.4	60.6	53.8	40.1	-3.7	153.51407	22-23
24	-24.072	-35.852	1614.49161	10.7	-1.3	-73.7	86.5	73.84702	0.788	-98.7	56.0	59.0	40.5	-14.4	147.56684	23-24
25	-18.282	-35.785	1515.24910	14.4	-0.3	-74.9	83.9	70.30564	0.889	-94.5	54.3	58.5	29.6	-9.9	175.36793	24-25
26	-13.250	-35.791	1454.06418	21.6	0.4	-76.9	80.7	67.82346	0.959	-90.2	53.2	58.3	19.7	-7.4	152.42481	25-26
27	-8.661	-35.844	1421.79489	40.8	0.9	-79.3	74.0	65.80627	0.996	-85.9	52.3	58.4	10.9	-6.8	139.01551	26-27
28	-4.882	-35.920	1413.41922	92.0	1.4	-81.7	69.1	63.33819	0.975	-82.2	51.8	58.8	7.0	-7.0	114.48244	27-28

JULY 31, 1964 13 HR 14 MIN 56 SEC 74 MS

TAB NO 72 ATLAS PHOTO NO 72 POD SEQUENCE NO 150

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				652.726		1397.46591	-4.833	-32.715	3132.921	2.078	-72.462	116.637				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.537	-18.679	1531.09167	-19.0	6.8	-79.2	64.1	70.29473	0.896	-93.4	69.5	39.2	33.0	29.5	0.	0-1
2	-12.887	-26.432	1457.26320	-34.3	6.1	-80.3	55.7	69.25543	0.925	-90.2	62.1	47.5	22.3	12.9	233.11320	1-2
3	-8.458	-31.365	1406.28592	-17.7	2.9	-80.3	60.0	66.22954	0.998	-85.6	56.7	53.1	8.6	3.2	198.86041	2-3
4	-8.224	-26.879	1423.91962	-56.0	4.7	-81.1	47.4	67.35348	0.971	-85.2	61.1	47.8	14.9	13.1	134.63220	3-4
5	-7.976	-22.116	1467.09024	-69.3	6.5	-81.7	37.7	69.04671	0.922	-84.8	65.8	42.4	24.0	23.3	143.00679	4-5
6	-12.755	-21.431	1503.65880	-50.6	8.8	-81.7	46.2	71.12175	0.874	-90.3	66.9	42.1	29.5	23.5	146.18151	5-6
7	-18.029	-20.435	1573.45995	-38.3	11.9	-82.4	53.1	74.10240	0.800	-95.8	68.6	42.4	37.6	22.3	167.36390	6-7
8	-18.009	-25.818	1521.08826	-23.9	7.9	-79.0	62.0	71.94898	0.854	-95.3	63.5	47.8	31.7	11.2	155.05089	7-8
9	-18.081	-30.822	1499.30380	-5.4	3.9	-77.6	72.3	70.56140	0.883	-94.8	58.9	53.2	28.9	0.6	144.10232	8-9
10	-13.049	-31.121	1438.25865	-8.3	3.3	-78.7	67.1	68.02934	0.953	-90.2	57.6	53.0	18.5	2.7	152.67749	9-10
11	-8.458	-31.365	1406.28592	-17.7	2.9	-80.3	60.0	66.22954	0.998	-85.6	56.7	53.1	8.6	3.2	139.23892	10-11
12	-4.932	-35.798	1403.04976	-91.6	1.4	-81.6	68.5	62.85688	0.974	-82.2	52.0	58.8	6.9	-6.8	170.83970	11-12
13	-4.677	-31.549	1398.28122	-94.1	2.6	-82.0	51.5	63.88447	0.981	-81.6	56.2	53.6	2.6	2.6	128.49325	12-13
14	-4.386	-27.175	1415.52406	-90.9	3.8	-82.1	37.8	66.18757	0.993	-80.9	60.5	48.3	12.3	12.2	132.34767	13-14
15	-4.048	-22.541	1457.35468	-90.5	4.9	-82.0	28.6	67.78852	0.944	-80.0	65.1	43.0	22.3	22.0	140.34859	14-15
16	-3.645	-17.452	1528.62840	-90.3	5.8	-81.6	21.7	70.09372	0.870	-79.0	70.1	37.9	32.7	32.2	154.30310	15-16
17	-7.705	-16.865	1541.04640	-75.3	8.1	-82.1	30.1	71.49815	0.847	-84.2	70.9	37.1	34.1	33.8	124.24328	16-17
18	-12.659	-15.866	1583.68660	-60.3	11.4	-83.2	38.4	73.86052	0.795	-90.3	72.3	36.8	38.6	34.5	152.98803	17-18
19	-18.175	-14.336	1664.80098	-48.7	15.9	-85.3	45.3	77.34516	0.713	-96.4	74.3	37.1	45.8	34.2	172.94117	18-19
20	-24.762	-11.801	1803.41893	-40.1	22.8	-89.3	51.1	82.72875	0.588	-102.3	77.4	38.1	55.4	33.1	211.88297	19-20
21	-24.191	-18.895	1689.31758	-30.3	16.8	-84.3	58.7	78.49854	0.689	-101.1	71.0	43.3	47.7	19.6	196.32194	20-21
22	-23.929	-24.923	1625.64224	-18.1	10.9	-80.5	67.0	75.83141	0.751	-100.2	65.5	48.5	42.5	7.6	166.87849	21-22
23	-23.870	-30.428	1598.58864	-4.0	4.9	-77.2	76.3	74.17275	0.783	-99.4	60.6	53.8	40.0	-3.5	152.45496	22-23
24	-23.976	-35.717	1602.43231	10.6	-1.2	-73.8	86.2	73.29475	0.789	-98.7	56.0	58.9	40.4	-14.3	146.47060	23-24
25	-18.234	-35.658	1504.18007	14.2	-0.2	-75.0	83.6	69.79178	0.889	-94.5	54.4	58.5	29.6	-9.7	173.42577	24-25
26	-13.240	-35.667	1443.51379	21.2	0.4	-76.9	80.3	67.33135	0.959	-90.2	53.3	58.3	19.6	-7.3	151.28495	25-26
27	-8.684	-35.721	1411.45026	40.2	1.0	-79.3	73.6	65.31507	0.996	-85.9	52.5	58.4	10.9	-6.5	138.01163	26-27
28	-4.932	-35.798	1403.04976	91.6	1.4	-81.6	68.5	62.85688	0.974	-82.2	52.0	58.8	6.9	-6.8	113.65203	27-28

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JULY 31, 1964 13 HR 15 MIN 1 SEC 194 MS TAB NO 73 ATLAS PHOTO NO 73 POD SEQUENCE NO 152

TRAJECTORY DATA								SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA								647.606	1387.31628	-4.860	-32.663	3122.772	2.080	-72.423	116.630	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.528	-18.698	1520.10222	-19.2	6.8	-79.2	63.9	69.80140	0.896	-93.4	69.4	39.2	32.9	29.5	0.	0- 1
2	-12.880	-26.373	1447.07817	-34.4	6.1	-80.3	55.6	68.77140	0.925	-90.2	62.2	47.5	22.3	13.0	230.87893	1- 2
3	-8.462	-31.274	1396.22330	-18.2	2.9	-80.3	59.8	65.75567	0.997	-85.6	56.8	53.1	8.7	3.3	197.51380	2- 3
4	-8.250	-26.819	1413.91788	-56.0	4.8	-81.1	47.4	66.88030	0.970	-85.2	61.2	47.7	15.0	13.2	133.70170	3- 4
5	-8.004	-22.088	1456.91145	-69.3	6.5	-81.7	37.8	68.56746	0.921	-84.8	65.8	42.4	24.1	23.3	142.04554	4- 5
6	-12.750	-21.406	1493.28140	-50.6	8.8	-81.7	46.2	70.69050	0.874	-90.3	66.9	42.1	29.5	23.5	145.18304	5- 6
7	-17.986	-20.417	1562.54866	-38.4	11.9	-82.4	53.0	73.58857	0.800	-95.8	68.6	42.4	37.6	22.3	161.21791	6- 7
8	-17.965	-25.763	1510.41362	-24.0	8.0	-80.0	61.9	71.44397	0.854	-95.3	63.5	47.8	31.7	11.3	154.01208	7- 8
9	-18.036	-30.731	1488.56792	-5.6	3.9	-77.6	72.0	70.05594	0.884	-94.8	58.9	53.2	28.9	0.7	143.11298	8- 9
10	-13.041	-31.030	1428.00940	-8.6	3.3	-78.8	66.9	67.54455	0.953	-90.2	57.7	53.0	18.5	2.8	151.56589	9-10
11	-8.482	-31.274	1396.22330	-18.2	2.9	-80.3	59.8	65.75567	0.997	-85.6	56.8	53.1	8.7	3.3	138.25367	10-11
12	-4.983	-35.676	1392.67683	91.1	1.4	-81.6	68.0	62.37603	0.974	-82.2	52.1	58.8	6.8	-6.7	127.54519	11-12
13	-4.728	-31.458	1388.18388	-92.7	2.7	-82.0	51.3	63.42768	0.981	-81.6	56.3	53.6	2.7	2.7	127.54519	12-13
14	-4.438	-27.115	1405.48177	-90.6	3.8	-82.1	37.9	65.71775	0.992	-80.9	60.6	48.3	12.4	12.2	131.42330	13-14
15	-4.103	-22.512	1447.13477	-90.3	4.9	-82.0	28.7	67.31264	0.944	-80.0	65.1	43.0	22.3	22.0	139.39316	14-15
16	-3.702	-17.457	1517.94780	-90.2	5.8	-81.6	21.9	69.60324	0.870	-79.0	70.1	37.9	32.7	32.2	153.24008	15-16
17	-7.734	-16.872	1530.39972	-75.2	8.1	-82.1	30.2	71.00385	0.847	-84.2	70.9	37.1	34.1	33.8	123.39172	16-17
18	-12.655	-15.879	1572.79550	-60.3	11.4	-83.2	38.4	73.35259	0.796	-90.3	72.3	36.8	38.6	34.5	151.94668	17-18
19	-18.132	-14.362	1653.25691	-48.7	15.9	-85.3	45.2	76.80905	0.714	-96.4	74.3	37.1	45.7	34.2	171.70222	18-19
20	-24.665	-11.856	1790.47415	-40.1	22.7	-89.2	51.1	82.13517	0.589	-102.3	77.4	38.1	55.3	33.1	210.10923	19-20
21	-24.101	-18.892	1677.33362	-30.4	16.8	-84.3	58.6	77.94156	0.690	-101.2	71.0	43.3	47.6	19.6	194.83420	20-21
22	-23.839	-24.814	1614.01295	13.2	10.9	-80.4	64.9	76.28858	0.752	-100.2	65.5	48.5	42.4	7.7	165.72662	21-22
23	-23.779	-30.337	1586.91896	-4.2	5.0	-77.3	76.1	71.63073	0.784	-99.4	60.7	53.8	40.0	-3.4	151.37558	22-23
24	-23.881	-35.583	1590.37286	10.4	-1.1	-73.9	86.0	72.74249	0.790	-98.7	56.1	58.9	40.3	-14.1	145.37516	23-24
25	-18.187	-35.530	1493.10643	13.9	-0.2	-75.1	83.3	69.27771	0.890	-94.5	54.5	58.5	29.5	-9.6	172.48622	24-25
26	-13.230	-35.543	1432.95792	20.9	0.5	-77.0	80.0	66.83899	0.959	-90.2	53.4	58.3	19.6	-7.2	150.14514	25-26
27	-8.707	-35.599	1401.10072	39.6	1.0	-79.3	73.1	64.82415	0.996	-85.9	52.6	58.4	10.8	-6.4	137.00704	26-27
28	-4.983	-35.676	1392.67683	91.1	1.4	-81.6	68.0	62.37603	0.974	-82.2	52.1	58.8	6.8	-6.7	112.82130	27-28

JULY 31, 1964 13 HR 15 MIN 6 SEC 314 MS TAB NO 74 ATLAS PHOTO NO 74 POD SEQUENCE NO 154

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R		V	PTH	AZ	
				642.486				1377.15671	-4.886	-32.610	3112.612		2.083	-72.384	116.623	
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.518	-18.717	1509.10034	-19.4	6.8	-79.2	63.7	69.30746	0.896	-93.4	69.4	39.2	32.9	29.4	0.	0- 1
2	-12.874	-26.315	1436.88010	-34.5	6.1	-80.3	59.5	68.28675	0.925	-90.2	62.2	47.5	22.4	13.1	228.64801	1- 2
3	-8.507	-31.184	1386.15170	-18.7	2.9	-80.3	59.5	65.28138	0.997	-85.6	56.9	53.1	8.8	3.4	196.16501	2- 3
4	-8.276	-26.759	1403.90433	-56.1	4.8	-81.1	47.3	66.40657	0.970	-85.2	61.2	47.7	15.1	13.2	132.77015	3- 4
5	-8.031	-22.060	1446.71844	-69.2	6.5	-81.7	37.8	68.08753	0.921	-84.8	65.8	42.4	24.1	23.3	141.08246	4- 5
6	-12.744	-21.381	1482.88837	-50.6	8.8	-81.7	46.1	70.13932	0.874	-90.3	67.0	42.1	29.5	23.6	144.18283	5- 6
7	-17.943	-20.400	1551.62117	-38.4	11.9	-82.4	52.9	73.07398	0.800	-95.8	68.6	42.4	37.6	22.4	160.07036	6- 7
8	-17.922	-25.708	1499.72562	-24.1	8.0	-80.0	61.7	70.93834	0.854	-95.3	63.6	47.8	31.7	11.4	152.97114	7- 8
9	-17.991	-30.640	1477.82220	-5.8	4.0	-77.7	71.8	69.55003	0.884	-94.8	59.0	53.2	28.9	0.8	142.12234	8- 9
10	-13.032	-30.939	1417.75021	-8.9	3.3	-78.8	66.6	67.05929	0.953	-90.2	57.8	53.0	18.5	2.9	150.45363	9-10
11	-8.507	-31.184	1386.15170	-18.7	2.9	-80.3	59.5	65.28138	0.997	-85.6	56.9	53.1	8.8	3.4	137.26737	10-11
12	-5.033	-35.554	1382.30006	90.6	1.4	-81.6	67.6	61.89563	0.974	-82.2	52.2	58.8	6.6	-6.6	168.36537	11-12
13	-4.779	-31.367	1378.07904	-91.4	2.7	-81.9	51.2	62.97071	0.981	-81.6	56.4	53.6	2.8	2.8	126.59721	12-13
14	-4.491	-27.054	1395.42918	-90.3	3.8	-82.1	37.9	65.24745	0.992	-80.9	60.6	48.3	12.5	12.3	130.49797	13-14
15	-4.157	-22.483	1436.90233	-90.2	4.9	-82.0	28.8	66.83619	0.944	-80.0	65.2	43.0	22.4	22.1	138.43619	14-15
16	-3.759	-17.463	1507.25314	-90.1	5.8	-81.6	22.0	69.11211	0.870	-79.0	70.1	37.9	32.7	32.2	152.17515	15-16
17	-7.763	-16.880	1519.73694	-75.2	8.2	-82.1	30.3	70.50881	0.846	-84.2	70.9	37.1	34.1	33.8	122.53901	16-17
18	-12.650	-15.892	1561.88672	-60.3	11.4	-83.2	38.4	72.84384	0.796	-90.3	72.3	36.8	38.6	34.5	150.90331	17-18
19	-18.087	-14.388	1641.69481	-48.7	15.8	-85.3	45.2	76.27210	0.714	-96.4	74.3	37.1	45.7	34.1	170.46181	18-19
20	-24.568	-11.912	1777.51598	-40.2	22.6	-89.2	51.0	81.54096	0.591	-102.3	77.3	38.1	55.2	33.0	208.33785	19-20
21	-24.010	-18.889	1665.33549	-30.5	16.7	-84.3	58.5	77.38392	0.691	-101.2	70.9	43.3	47.5	19.6	193.34595	20-21
22	-23.750	-24.825	1602.37221	-18.4	10.9	-80.6	66.7	74.74521	0.752	-100.2	65.6	48.5	42.4	7.8	164.57265	21-22
23	-23.687	-30.246	1575.24210	-4.3	5.0	-77.4	75.8	73.08839	0.785	-99.4	60.7	53.8	39.9	-3.3	150.33295	22-23
24	-23.786	-35.449	1578.31273	10.2	-1.0	-74.1	85.7	72.19020	0.792	-98.7	56.2	58.9	40.2	-13.9	144.28043	23-24
25	-18.139	-35.403	1482.02782	13.7	-0.1	-75.2	82.9	68.76341	0.890	-94.5	54.6	58.5	29.4	-9.4	171.04908	24-25
26	-13.219	-35.419	1422.39613	20.5	0.5	-77.0	79.6	66.34634	0.959	-90.2	53.5	58.3	19.5	-7.0	149.00522	25-26
27	-8.729	-35.477	1390.74597	39.0	1.0	-79.3	72.7	64.33351	0.996	-85.9	52.7	58.4	10.8	-6.2	136.00186	26-27
28	-5.033	-35.554	1382.30006	90.6	1.4	-81.6	67.6	61.89563	0.974	-82.2	52.2	58.8	6.6	-6.6	111.99017	27-28

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TAB NO 75 ATLAS PHOTO NO 75 POD SEQUENCE NO 156
 JULY 31, 1964 13 HR 15 MIN 11 SEC 434 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
				637.366		1366.98740	-4.913	-32.556	3102.443	2.085	-72.344	116.616				
PHOTO DATA																
PT	LAT	LUN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.509	-18.736	1498.08620	-19.5	6.8	-79.3	63.6	68.81293	0.896	-93.4	69.4	39.2	32.8	29.4	0.	0-1
2	-12.867	-26.257	1426.66910	-34.7	6.1	-80.3	55.3	67.80147	0.924	-90.2	62.3	47.5	22.4	13.1	226.42065	1-2
3	-8.531	-31.093	1376.07124	-19.2	2.9	-80.3	59.3	64.80666	0.997	-85.6	57.0	53.1	8.8	3.5	194.81407	2-3
4	-8.302	-26.699	1393.87903	-56.1	4.8	-81.1	47.2	65.93228	0.970	-85.2	61.3	47.7	15.1	13.3	131.83749	3-4
5	-8.058	-22.032	1436.51132	-69.1	6.5	-81.7	37.8	67.60694	0.921	-84.8	65.9	42.4	24.1	23.4	140.11761	4-5
6	-12.736	-21.357	1472.47980	-50.7	8.8	-81.7	46.1	69.64700	0.874	-90.3	67.0	42.1	29.6	23.6	143.18097	5-6
7	-17.900	-20.382	1540.67752	-38.5	11.9	-82.5	52.8	72.55863	0.800	-95.8	68.6	42.4	37.5	22.4	158.92114	6-7
8	-17.878	-25.653	1489.02431	-24.3	8.0	-80.1	61.6	70.43207	0.855	-95.3	63.4	47.8	31.7	11.4	151.92777	7-8
9	-17.966	-30.450	1467.06679	-6.0	4.0	-77.6	71.5	69.04366	0.884	-94.8	59.1	51.2	28.8	0.9	141.13037	8-9
10	-13.024	-30.849	1407.48120	-9.2	3.4	-78.8	66.4	66.57356	0.952	-90.2	57.9	52.9	18.5	3.0	149.34041	9-10
11	-8.531	-31.093	1376.07124	-19.2	2.9	-80.3	59.3	64.80666	0.997	-85.6	57.0	53.1	8.8	3.5	136.28001	10-11
12	-5.083	-35.432	1371.91962	90.0	1.4	-81.6	67.1	61.41566	0.974	-82.2	52.3	58.8	6.5	-6.4	167.12789	11-12
13	-4.831	-31.276	1367.96680	-90.1	2.7	-81.9	51.0	62.51356	0.981	-81.6	56.5	53.6	2.9	2.9	125.64929	12-13
14	-4.544	-26.994	1385.36639	-90.0	3.9	-82.0	37.9	64.77668	0.992	-80.9	60.7	48.3	12.5	12.4	129.57170	13-14
15	-4.212	-22.454	1426.65747	-90.0	4.9	-81.9	28.9	66.35917	0.943	-80.0	65.2	43.0	22.4	22.1	137.47762	14-15
16	-3.817	-17.468	1496.54440	-90.0	5.9	-81.6	22.1	68.62035	0.870	-79.0	70.1	37.9	32.6	32.2	151.10843	15-16
17	-7.792	-16.887	1509.05809	-75.1	8.2	-82.1	30.3	70.01302	0.846	-84.2	70.9	37.1	34.1	33.8	121.68492	16-17
18	-12.645	-15.906	1550.96027	-60.3	11.4	-83.2	38.4	72.33426	0.796	-90.3	72.3	36.8	38.6	34.5	149.95801	17-18
19	-18.043	-14.414	1630.11464	-48.8	15.8	-85.3	45.2	75.73431	0.715	-96.4	74.2	37.1	45.6	34.1	165.21976	18-19
20	-24.471	-11.968	1764.54451	-40.2	22.5	-89.2	51.0	80.94614	0.592	-102.3	77.3	38.1	55.2	33.0	206.56910	19-20
21	-23.919	-18.887	1653.32332	-30.5	16.7	-84.3	58.4	76.82563	0.691	-101.2	70.9	43.3	47.5	19.7	191.85722	20-21
22	-23.660	-24.776	1590.72000	-18.5	10.9	-80.7	66.6	74.20132	0.751	-100.2	65.6	48.5	42.3	7.9	143.16668	21-22
23	-23.596	-30.155	1563.55815	-4.5	5.0	-77.5	75.6	72.54572	0.786	-99.4	60.8	53.8	39.8	-3.1	149.27005	22-23
24	-23.690	-35.315	1566.25208	10.1	-0.9	-74.2	85.4	71.63791	0.793	-98.7	56.3	58.9	40.1	-13.7	143.16668	23-24
25	-18.090	-35.276	1470.94427	13.5	-0.1	-75.3	82.6	68.24889	0.891	-94.5	54.7	58.5	29.4	-9.3	169.61453	24-25
26	-13.209	-35.295	1411.82864	20.2	0.5	-77.1	79.2	65.85343	0.960	-90.2	53.8	58.3	19.5	-6.9	147.86515	25-26
27	-8.752	-35.355	1380.38612	38.3	1.0	-79.3	72.3	63.84312	0.995	-85.9	52.8	58.4	10.7	-6.1	134.99616	26-27
28	-5.083	-35.432	1371.91962	90.0	1.4	-81.6	67.1	61.41566	0.974	-82.2	52.3	58.8	6.5	-6.4	111.15852	27-28

TAB NO 76 ATLAS PHOTO NO 76 POD SEQUENCE NO 158
 JULY 31, 1964 13 HR 15 MIN 16 SEC 553 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LUN	R	V	PTH	AZ			
				632.246			1356.80801	-4.940	-32.502	3092.263	2.088	-72.305	116.609			
PHOTO DATA																
PT	LAT	LUN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.500	-18.755	1487.05946	-19.7	6.8	-79.3	63.4	68.31768	0.896	-93.4	69.4	39.2	32.8	29.4	0.	0-1
2	-12.860	-26.199	1416.44319	-34.8	6.1	-80.4	55.2	67.31549	0.924	-90.2	62.3	47.5	22.4	13.2	224.19646	1-2
3	-8.555	-31.003	1365.98090	-19.7	3.0	-80.3	59.1	64.33144	0.997	-85.6	57.1	53.1	8.9	3.6	193.46047	2-3
4	-8.327	-26.640	1383.84076	-56.1	4.8	-81.1	47.1	65.45739	0.969	-85.2	61.3	47.7	15.2	13.4	130.90360	3-4
5	-8.085	-22.004	1426.28854	-69.1	6.6	-81.7	37.8	67.12562	0.920	-84.8	65.9	42.3	24.2	23.4	139.15079	4-5
6	-12.732	-21.333	1462.05338	-50.7	8.8	-81.7	46.1	69.15384	0.873	-90.3	67.0	42.1	29.6	23.6	142.17699	5-6
7	-17.857	-20.365	1529.71436	-38.6	11.4	-82.5	52.7	72.04235	0.800	-95.8	68.6	42.4	37.5	22.4	157.76971	6-7
8	-17.835	-25.598	1478.30681	-24.4	8.0	-80.1	61.4	69.92504	0.855	-95.3	63.7	47.8	31.7	11.5	150.88223	7-8
9	-17.900	-30.459	1456.29903	-6.2	4.0	-77.8	71.3	68.53672	0.884	-94.8	59.2	53.2	28.8	1.0	140.13684	8-9
10	-13.015	-30.759	1397.20065	-9.5	3.4	-78.9	66.1	66.08729	0.952	-90.2	57.9	52.9	18.5	3.1	148.22593	9-10
11	-8.555	-31.003	1365.98090	-19.7	3.0	-80.3	59.1	64.33144	0.997	-85.6	57.1	53.1	8.9	3.6	135.29132	10-11
12	-5.133	-35.310	1361.53508	89.5	1.4	-81.5	66.6	60.93612	0.974	-82.2	52.5	58.8	6.4	-6.3	165.89009	11-12
13	-4.882	-31.185	1357.84660	-88.9	2.7	-81.9	50.9	62.05619	0.981	-81.6	56.5	53.6	3.0	3.0	124.70138	12-13
14	-4.596	-26.933	1375.29269	-89.7	3.9	-82.0	37.9	64.30540	0.992	-80.9	60.8	48.3	12.6	12.4	128.64441	13-14
15	-4.266	-22.425	1416.39928	-89.9	5.0	-81.9	29.0	65.88154	0.943	-80.0	65.2	43.0	22.4	22.1	136.51738	14-15
16	-3.873	-17.474	1485.82043	-89.9	5.9	-81.5	22.3	68.12790	0.870	-79.0	70.1	37.9	32.6	32.2	150.03972	15-16
17	-7.821	-16.895	1498.36130	-75.1	8.2	-82.1	30.4	69.51642	0.846	-84.2	70.9	37.1	34.1	33.8	120.82938	16-17
18	-12.639	-15.920	1540.01329	-60.3	11.4	-83.2	38.4	71.82373	0.796	-90.3	72.3	36.8	38.6	34.5	148.81030	17-18
19	-17.999	-14.441	1618.51222	-48.8	15.8	-85.3	45.2	75.19548	0.715	-96.4	74.2	37.1	45.6	34.1	167.97526	18-19
20	-24.374	-12.024	1751.55307	-40.3	22.4	-89.2	50.9	80.35039	0.593	-102.3	77.2	38.1	55.1	32.9	204.80080	19-20
21	-23.828	-18.884	1641.29187	-30.6	16.6	-84.4	58.3	76.26445	0.692	-101.2	70.9	43.3	47.4	19.7	190.36675	20-21
22	-23.570	-24.728	1579.05206	-18.6	10.9	-80.8	66.4	73.65669	0.754	-100.2	65.6	48.5	42.3	8.0	162.25792	21-22
23	-23.504	-30.065	1551.86322	-4.6	5.1	-77.5	75.4	72.00257	0.786	-99.4	60.9	53.8	39.7	-3.0	148.20545	22-23
24	-23.594	-35.181	1554.18721	9.9	-0.8	-74.3	85.1	71.08543	0.794	-98.7	56.4	58.9	40.0	-13.5	142.09260	23-24
25	-18.042	-35.148	1459.85353	13.2	-0.0	-75.4	82.3	67.73404	0.892	-94.5	54.9	58.5	29.3	-9.1	168.18151	24-25
26	-13.198	-35.172	1401.25391	19.8	0.6	-77.2	78.8	65.36019	0.960	-90.2	53.8	58.3	19.4	-6.8	146.72462	25-26
27	-8.775	-35.233	1370.02029	37.7	1.0	-79.4	71.8	63.35243	0.995	-85.9	53.0	58.4	10.6	-6.0	133.98946	26-27
28	-5.133	-35.310	1361.53508	89.5	1.4	-81.5	66.6	60.93612	0.974	-82.2	52.5	58.8	6.4	-6.3	110.32658	27-28

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JULY 31, 1964 13 HR 15 MIN 21 SEC 673 MS

TAB NO 77

ATLAS PHOTO NO 77

POD SEQUENCE NO 160

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				627.126		1346.61880	-4.967	-32.448	3082.074	2.090	-72.265	116.602				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.490	-18.774	1476.02040	-19.9	6.8	-79.4	63.2	67.82175	0.896	-93.4	69.4	39.2	32.8	29.3	0.	0-
2	-12.852	-26.141	1406.20285	-34.9	6.2	-80.4	55.1	66.82883	0.924	-90.2	62.4	47.5	22.5	13.2	221.97565	1-2
3	-8.579	-30.912	1355.88100	-20.2	3.0	-80.3	58.8	63.85586	0.997	-85.6	57.2	53.1	8.9	3.7	192.10435	2-3
4	-8.352	-26.580	1373.78987	-56.1	4.8	-81.1	47.1	64.98189	0.969	-85.2	61.4	47.7	15.3	13.4	129.96851	3-4
5	-8.112	-21.977	1416.05052	-69.0	6.6	-81.7	37.8	66.64359	0.920	-84.8	65.9	42.3	24.2	23.4	138.18200	4-5
6	-12.726	-21.309	1451.60962	-50.8	8.8	-81.8	46.0	68.65986	0.873	-90.3	67.0	42.1	29.6	23.6	141.17100	5-6
7	-17.813	-20.348	1518.73241	-38.6	11.9	-82.5	52.7	71.52520	0.800	-95.8	68.6	42.4	37.5	22.5	156.61604	6-7
8	-17.790	-25.544	1467.57376	-24.5	8.0	-80.2	61.3	69.41728	0.855	-95.3	63.7	47.8	31.7	11.6	149.83396	7-8
9	-17.854	-30.369	1445.51964	-6.4	4.1	-77.9	71.1	68.02923	0.884	-94.8	59.2	53.2	28.8	1.1	139.14174	8-9
10	-13.006	-30.668	1386.90906	-9.8	3.4	-78.9	65.9	65.60050	0.952	-90.2	58.0	52.9	18.5	3.2	147.11038	9-10
11	-8.579	-30.912	1355.88100	-20.2	3.0	-80.3	58.8	63.85586	0.997	-85.6	57.2	53.1	8.9	3.7	134.30130	10-11
12	-5.183	-35.189	1351.14671	88.9	1.4	-81.5	66.1	60.45700	0.973	-82.2	52.6	58.8	6.3	-6.2	164.65193	11-12
13	-4.933	-31.095	1347.71878	-87.8	2.7	-81.8	50.7	61.59862	0.981	-81.6	56.6	53.6	3.1	3.1	123.75355	12-13
14	-4.649	-26.873	1365.20840	-89.5	3.9	-82.0	38.0	63.83362	0.991	-80.9	60.8	48.3	12.6	12.5	127.71611	13-14
15	-4.320	-22.396	1406.12804	-89.7	5.0	-81.9	29.1	65.40331	0.943	-80.0	65.3	43.0	22.5	22.2	135.55541	14-15
16	-3.930	-17.480	1475.08148	-89.8	5.9	-81.5	22.4	67.63479	0.970	-79.0	70.1	37.8	32.6	32.2	148.96896	15-16
17	-7.849	-16.903	1487.64697	-75.0	8.2	-82.1	30.4	69.01901	0.846	-84.2	70.9	37.1	34.1	33.8	119.97229	16-17
18	-12.633	-15.934	1529.04642	-60.3	11.4	-83.2	38.4	71.31228	0.796	-90.3	72.2	36.7	38.6	34.5	147.76029	17-18
19	-17.953	-14.468	1606.88846	-48.8	15.7	-85.3	45.1	74.65566	0.716	-96.4	74.2	37.1	45.6	34.1	166.72836	18-19
20	-24.276	-12.081	1738.54297	-40.3	22.3	-89.1	50.9	79.75379	0.595	-102.3	77.1	38.1	55.0	32.9	203.03341	19-20
21	-23.736	-18.882	1629.24232	-30.7	16.6	-84.4	58.2	75.70642	0.693	-101.2	70.9	43.2	47.3	19.7	188.87470	20-21
22	-23.480	-24.680	1561.36924	-10.1	10.5	-80.3	65.6	72.11128	0.764	-100.2	65.4	48.5	42.2	8.1	161.09655	21-22
23	-23.413	-29.974	1540.15816	-4.8	5.1	-77.6	75.2	71.45894	0.787	-99.4	60.9	53.7	39.7	-2.9	147.13914	22-23
24	-23.499	-35.048	1542.11899	9.7	-0.7	-74.4	84.8	70.53283	0.795	-98.7	56.5	58.9	39.9	-13.4	140.99924	23-24
25	-17.993	-35.021	1448.75610	13.0	0.1	-75.5	82.0	67.21889	0.892	-94.5	55.0	58.4	29.2	-9.0	166.75025	24-25
26	-13.187	-35.048	1390.67233	19.5	0.6	-77.2	78.4	64.86663	0.960	-90.2	53.9	58.3	19.4	-6.7	145.58355	25-26
27	-8.797	-35.111	1359.64885	37.0	1.1	-79.4	71.4	62.86293	0.995	-85.9	53.1	58.4	10.6	-5.8	132.98205	26-27
28	-5.183	-35.189	1351.14671	88.9	1.4	-81.5	66.1	60.45700	0.973	-82.2	52.6	58.8	6.3	-6.2	109.49404	27-28

JULY 31, 1964 13 HR 15 MIN 26 SEC 793 MS

TAB NO 78

ATLAS PHOTO NO 78

POD SEQUENCE NO 162

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				622.006		1336.41971	-4.994	-32.393	3071.875	2.093	-72.225	116.595				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.481	-18.794	1464.96884	-20.0	6.8	-79.4	63.0	67.32520	0.896	-93.4	69.3	39.3	32.7	29.3	0.	0-1
2	-12.845	-26.084	1395.94934	-35.1	6.2	-80.4	54.9	66.34154	0.924	-90.2	62.4	47.5	22.5	13.3	219.75846	1-2
3	-8.602	-30.822	1345.77199	-20.7	3.0	-80.3	58.6	63.37980	0.997	-85.6	57.3	53.1	9.0	3.8	190.74602	2-3
4	-8.377	-26.521	1363.72693	-56.2	4.8	-81.1	47.0	64.50582	0.969	-85.2	61.5	47.7	15.3	13.5	129.03228	3-4
5	-8.139	-21.949	1405.79807	-69.0	6.6	-81.6	37.8	66.16088	0.920	-84.8	66.0	42.3	24.3	23.5	137.21141	4-5
6	-12.720	-21.285	1441.15004	-50.8	8.8	-81.8	46.0	68.16513	0.873	-90.3	67.1	42.1	29.6	23.7	140.16344	5-6
7	-17.769	-20.331	1507.73412	-38.7	11.9	-82.5	52.6	71.00727	0.800	-95.8	68.6	42.4	37.5	22.5	155.46083	6-7
8	-17.746	-25.489	1456.82721	-24.6	8.0	-80.2	61.1	68.90887	0.855	-95.3	63.8	47.8	31.7	11.6	148.78355	7-8
9	-17.808	-30.279	1434.73027	-6.6	4.1	-78.0	70.8	67.52127	0.885	-94.8	59.3	53.2	28.7	1.3	138.14528	8-9
10	-12.997	-30.578	1376.60742	-10.1	3.4	-78.9	65.6	65.11323	0.952	-90.2	58.1	52.9	18.6	3.3	145.99387	9-10
11	-8.602	-30.822	1345.77199	-20.7	3.0	-80.3	58.6	63.37980	0.997	-85.6	57.3	53.1	9.0	3.8	133.31032	10-11
12	-5.233	-35.067	1340.75435	88.3	1.4	-81.5	65.7	59.97827	0.973	-82.2	52.7	58.8	6.1	-6.1	163.41348	11-12
13	-4.983	-31.004	1337.58322	-86.8	2.7	-81.8	50.6	61.14084	0.981	-81.6	56.7	53.6	3.2	3.2	122.80569	12-13
14	-4.701	-26.813	1355.11357	-89.2	3.9	-81.9	38.0	63.36135	0.991	-80.9	60.9	48.3	12.7	12.6	126.78684	13-14
15	-4.374	-22.367	1395.84406	-89.5	5.0	-81.8	29.2	64.92449	0.943	-80.0	65.3	43.0	22.5	22.2	134.59184	14-15
16	-3.987	-17.487	1464.32819	-89.7	6.0	-81.5	22.5	67.14103	0.871	-90.2	70.1	37.8	32.6	32.2	147.89641	15-16
17	-7.878	-16.912	1476.91631	-74.9	8.2	-82.1	30.5	70.79998	0.796	-90.3	72.2	36.7	38.6	34.5	146.70836	16-17
18	-12.628	-15.948	1518.06165	-60.3	11.4	-83.2	38.4	74.11499	0.716	-96.4	74.1	37.1	45.5	34.0	165.47991	17-18
19	-17.908	-14.496	1595.24649	-48.8	15.7	-85.3	45.1	79.15657	0.596	-102.3	77.1	38.1	54.9	32.8	201.26870	18-19
20	-24.178	-12.137	1725.51967	-40.4	22.2	-89.1	50.8	75.14573	0.694	-101.2	70.9	43.2	47.3	19.8	187.38225	19-20
21	-23.644	-18.879	1617.17865	-30.8	16.5	-84.4	58.1	72.56553	0.755	-100.2	65.7	48.5	42.1	8.1	159.93316	20-21
22	-23.389	-24.632	1555.67496	-18.8	10.8	-80.9	66.1	70.91500	0.788	-99.4	61.0	53.7	39.6	-2.7	146.07155	21-22
23	-23.321	-29.884	1528.44586	-4.9	5.1	-77.7	75.0	69.98019	0.797	-98.7	56.6	58.9	39.7	-13.2	139.90643	22-23
24	-23.403	-34.915	1530.04991	9.6	-0.6	-74.5	84.5	66.70351	0.893	-94.5	55.1	58.4	29.2	-8.8	165.32135	23-24
25	-17.945	-34.895	1437.65358	12.8	0.1	-75.6	81.6	64.37279	0.960	-90.2	54.0	58.3	19.3	-6.5	144.44243	24-25
26	-13.176	-34.925	1380.08479	19.1	0.6	-77.3	78.0	62.37315	0.995	-85.9	53.2	58.4	10.5	-5.7	131.97384	25-26
27	-8.819	-34.989	1349.27202	36.4	1.1	-79.4	71.0									26-27
28	-5.233	-35.067	1340.75435	88.3	1.4	-81.5	65.7	59.97827	0.973	-82.2	52.7	58.8	6.1	-6.1	108.66119	27-28

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JULY 31, 1964 13 HR 15 MIN 31 SEC 913 MS

TAB NO 79 ATLAS PHOTO NO 79 POD SEQUENCE NO 164

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				616.886	1326.21051	-5.022	-32.338	3061.666	2.096	-72.185	116.588					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.472	-18.813	1453.90465	-20.2	6.8	-79.5	62.8	66.82735	0.896	-93.4	69.3	39.3	32.7	29.3	0	0-1
2	-12.836	-26.027	1385.67087	-35.2	6.2	-80.4	54.8	65.85306	0.924	-90.2	62.5	47.5	22.5	13.4	217.55792	1-2
3	-8.625	-30.732	1335.64915	-21.2	3.0	-80.3	58.4	62.90309	0.996	-85.6	57.4	53.1	9.1	3.9	189.38253	2-3
4	-8.402	-26.462	1353.64539	-56.2	4.9	-81.1	46.9	64.02888	0.969	-85.2	61.5	47.7	15.4	13.6	128.09413	3-4
5	-8.164	-21.923	1395.52216	-69.0	6.6	-81.6	37.8	67.66896	0.873	-90.3	67.1	42.1	29.7	23.7	139.15147	5-6
6	-12.712	-21.262	1430.65994	-50.8	8.8	-81.8	45.9	65.67708	0.920	-84.8	66.0	42.3	24.3	23.5	136.23754	4-5
7	-17.724	-20.316	1496.65678	-38.8	11.8	-82.5	52.5	70.48750	0.801	-95.8	68.6	42.4	37.5	22.5	154.29906	6-7
8	-17.700	-25.436	1446.04866	-24.8	8.0	-80.3	61.0	68.39896	0.855	-95.3	63.8	47.8	31.7	11.7	147.72765	7-8
9	-17.761	-30.149	1423.91534	-6.8	4.1	-78.0	70.6	67.01213	0.865	-94.8	59.4	53.1	28.7	1.4	137.14540	8-9
10	-12.987	-30.489	1366.28622	-10.4	3.5	-79.0	65.4	64.62505	0.952	-90.2	58.2	52.9	18.6	3.4	144.87300	9-10
11	-8.625	-30.732	1335.64915	-21.2	3.0	-80.3	58.4	62.90309	0.996	-85.6	57.4	53.1	9.1	3.9	132.31639	10-11
12	-5.282	-34.946	1330.35857	87.7	1.4	-81.4	65.2	59.50004	0.973	-82.2	52.8	58.8	6.0	-5.9	162.17429	11-12
13	-5.034	-30.914	1327.43896	-85.8	2.7	-81.8	50.5	60.68275	0.982	-81.6	56.8	53.6	3.3	3.3	121.85785	12-13
14	-4.752	-26.753	1345.00552	-88.9	3.9	-81.9	38.0	62.88848	0.991	-80.9	60.9	48.3	12.8	12.7	125.85613	13-14
15	-4.428	-22.339	1385.54257	-89.4	5.0	-81.8	24.3	64.44487	0.943	-80.0	65.3	43.0	22.5	22.3	133.62571	14-15
16	-4.043	-17.494	1453.55304	-89.6	6.0	-81.4	22.7	66.64631	0.871	-79.0	70.1	37.8	32.6	32.2	146.82025	15-16
17	-7.905	-16.921	1466.15685	-74.9	8.3	-82.0	30.6	68.02139	0.846	-84.2	70.9	37.0	34.1	33.8	118.25287	16-17
18	-12.621	-15.964	1507.03949	-60.3	11.4	-83.2	38.4	70.28597	0.796	-90.3	72.2	36.7	38.5	34.5	145.65103	17-18
19	-17.862	-14.525	1583.55682	-48.9	15.7	-85.3	45.1	73.57211	0.717	-96.4	74.1	37.1	45.5	34.0	164.22315	18-19
20	-24.079	-12.195	1712.43579	-40.4	22.1	-89.1	50.8	78.55657	0.598	-102.3	77.0	38.1	54.8	32.8	199.49239	19-20
21	-23.551	-18.879	1605.06560	-30.8	16.4	-84.6	58.0	74.58275	0.695	-101.2	70.9	43.2	47.2	19.8	185.87934	20-21
22	-23.297	-24.585	1543.94041	-18.9	10.8	-80.9	65.9	72.01782	0.756	-100.2	65.7	48.5	42.1	8.2	158.76242	21-22
23	-23.227	-29.795	1516.70168	-5.1	5.2	-77.8	74.7	70.36960	0.789	-99.4	61.0	53.7	39.5	-2.6	144.99946	22-23
24	-23.306	-34.783	1517.95799	9.4	-0.6	-74.7	84.2	69.42656	0.798	-98.7	56.6	58.9	39.6	-13.0	138.81205	23-24
25	-17.895	-34.768	1426.53239	12.5	0.2	-75.7	81.3	66.18729	0.893	-94.5	55.2	58.4	29.1	-8.7	163.88892	24-25
26	-13.164	-34.802	1369.48360	18.8	0.7	-77.3	77.7	63.87833	0.961	-90.2	54.1	58.3	19.3	-6.4	143.29795	25-26
27	-8.841	-34.867	1338.88683	35.7	1.1	-79.4	70.5	61.88325	0.995	-85.9	53.5	58.4	10.4	-5.6	130.96344	26-27
28	-5.282	-34.946	1330.35857	87.7	1.4	-81.4	65.2	59.50004	0.973	-82.2	52.8	58.8	6.0	-5.9	107.82749	27-28

JULY 31, 1964 13 HR 15 MIN 37 SEC 33 MS

TAB NO 80 ATLAS PHOTO NO 80 POD SEQUENCE NO 166

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				611.766	1315.99088	-5.049	-32.283	3051.446	2.098	-72.144	116.581					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.463	-18.832	1442.82745	-20.4	6.8	-79.5	62.7	66.32843	0.896	-93.4	69.3	39.3	32.6	29.2	0	0-1
2	-12.827	-25.970	1375.37141	-35.3	6.2	-80.4	54.7	65.36359	0.923	-90.2	62.5	47.5	22.6	13.4	215.36884	1-2
3	-8.647	-30.642	1325.51378	-21.6	3.0	-80.4	58.2	62.42578	0.996	-85.6	57.4	53.1	9.1	4.0	188.01481	2-3
4	-8.425	-26.403	1343.54721	-56.2	4.9	-81.1	46.8	63.55115	0.968	-85.2	61.6	47.7	15.5	13.6	127.15427	3-4
5	-8.190	-21.897	1385.22574	-68.9	6.6	-81.6	37.9	65.19233	0.919	-84.8	66.0	42.3	24.3	23.5	135.26089	4-5
6	-12.704	-21.240	1420.14413	-50.9	8.8	-81.8	45.9	67.17158	0.873	-90.3	67.1	42.1	29.7	23.7	138.13623	5-6
7	-17.678	-20.301	1485.62860	-38.9	11.8	-82.6	52.4	69.96628	0.801	-95.8	68.6	42.4	37.5	22.5	153.13256	6-7
8	-17.654	-25.383	1435.24463	-24.9	8.0	-80.3	60.8	67.88784	0.855	-95.3	63.9	47.8	31.7	11.8	146.66746	7-8
9	-17.714	-30.100	1413.08029	-7.0	4.2	-78.1	70.4	66.50204	0.885	-94.9	59.5	53.1	28.7	1.5	136.14288	8-9
10	-12.976	-30.399	1355.94856	-10.6	3.5	-79.0	65.1	64.13608	0.952	-90.2	58.3	52.9	18.6	3.5	143.74924	9-10
11	-8.647	-30.642	1325.51378	-21.6	3.0	-80.4	58.2	62.42578	0.996	-85.6	57.4	53.1	9.1	4.0	131.32018	10-11
12	-5.330	-34.824	1319.95857	87.1	1.4	-81.4	64.8	59.02221	0.973	-82.2	53.0	58.8	5.9	-5.8	160.93448	11-12
13	-5.083	-30.824	1317.28584	-85.0	2.7	-81.7	50.3	60.22434	0.982	-81.6	56.9	53.6	3.4	3.4	120.90997	12-13
14	-4.803	-26.694	1334.88480	-88.7	4.0	-81.9	38.0	62.41501	0.991	-80.9	61.0	48.3	12.8	12.7	124.92414	13-14
15	-4.481	-22.311	1375.22493	-89.2	5.1	-81.8	29.4	63.96453	0.942	-80.0	65.3	43.0	22.6	22.3	132.65732	14-15
16	-4.099	-17.501	1442.75850	-89.5	6.0	-81.4	22.8	66.15074	0.871	-79.0	70.1	37.8	32.6	32.2	145.74120	15-16
17	-7.933	-16.931	1455.37292	-74.8	8.3	-82.0	30.6	67.52081	0.846	-84.2	70.9	37.0	34.1	33.8	117.38975	16-17
18	-12.614	-15.980	1495.98697	-60.3	11.4	-83.2	38.4	69.77055	0.796	-90.3	72.2	36.7	38.5	34.5	144.58944	17-18
19	-17.815	-14.554	1571.83035	-48.9	15.6	-85.2	45.0	73.02752	0.718	-96.4	74.1	37.1	45.4	34.0	162.96071	18-19
20	-23.979	-12.254	1699.30940	-40.5	22.0	-89.0	50.7	77.95461	0.599	-102.3	76.9	38.1	54.7	32.7	197.71021	19-20
21	-23.457	-18.879	1592.91620	-30.9	16.4	-84.4	57.9	74.01808	0.696	-101.2	70.9	43.2	47.1	19.8	184.37002	20-21
22	-23.205	-24.538	1532.17612	-19.1	10.8	-81.0	65.8	71.46873	0.757	-100.2	65.7	48.5	42.0	8.3	157.58639	21-22
23	-23.133	-29.707	1504.93443	-5.2	5.2	-77.9	74.5	69.82315	0.790	-99.4	61.1	53.7	39.4	-2.5	143.92398	22-23
24	-23.208	-34.652	1505.85098	9.2	-0.5	-74.8	83.9	68.87227	0.799	-98.7	56.7	58.9	39.5	-12.8	137.71683	23-24
25	-17.844	-34.643	1415.39713	12.3	0.2	-75.8	81.0	65.67044	0.894	-94.5	55.3	58.4	29.0	-8.5	162.45500	24-25
26	-13.151	-34.679	1358.87112	18.4	0.7	-77.4	77.3	63.38334	0.961	-90.2	54.2	58.3	19.2	-6.3	142.15133	25-26
27	-8.862	-34.746	1328.49379	35.0	1.1	-79.4	70.1	61.39331	0.995	-85.9	53.5	58.4	10.4	-5.5	129.95138	26-27
28	-5.330	-34.824	1319.95857	87.1	1.4	-81.4	64.8	59.02221	0.973	-82.2	53.0	58.8	5.9	-5.8	106.99314	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 15 MIN 42 SEC 153 MS

TAB NO 81

ATLAS PHOTO NO 81

POD SEQUENCE NO 168

TRAJECTORY DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.453	-18.851	1431.73793	-20.6	6.7	-79.6	62.5	65.82892	0.896	-93.4	69.3	39.3	32.6	29.2	0.	0-1
2	-12.818	-25.914	1365.05893	-35.5	6.2	-80.5	54.5	64.87349	0.923	-90.2	62.6	47.5	22.6	13.5	213.18323	1-2
3	-8.670	-30.553	1315.36919	-22.1	3.1	-80.4	58.0	61.94805	0.996	-85.6	57.5	53.1	9.2	4.1	186.64494	2-3
4	-8.449	-26.345	1333.43701	-56.2	4.9	-81.1	46.8	63.07286	0.968	-85.2	61.7	47.7	15.6	13.7	126.21329	3-4
5	-8.215	-21.871	1374.91501	-68.9	6.6	-81.6	37.9	64.70690	0.919	-84.8	66.0	42.3	24.4	23.6	134.28249	4-5
6	-12.696	-21.217	1409.61288	-50.9	8.8	-81.8	45.8	66.67347	0.873	-90.3	67.1	42.1	29.7	23.8	137.11925	5-6
7	-17.632	-20.286	1474.54468	-38.9	11.8	-82.6	52.3	69.44431	0.801	-95.8	68.6	42.4	37.5	22.6	151.96484	6-7
8	-17.608	-25.330	1424.42751	-25.0	8.0	-80.4	60.7	67.37610	0.855	-95.3	63.9	47.8	31.7	11.9	145.60520	7-8
9	-17.666	-30.011	1402.23563	-7.2	4.2	-78.2	70.1	65.99151	0.885	-94.9	59.5	53.1	28.7	1.6	135.13900	8-9
10	-12.966	-30.310	1345.60095	-10.9	3.5	-79.1	64.9	63.64665	0.952	-90.2	58.4	52.9	18.6	3.6	142.62473	9-10
11	-8.670	-30.553	1315.36919	-22.1	3.1	-80.4	58.0	61.94805	0.996	-85.6	57.5	53.1	9.2	4.1	130.32292	10-11
12	-5.378	-34.703	1309.55429	-86.5	1.4	-81.4	64.4	59.54472	0.972	-82.2	53.1	58.8	5.8	-5.7	159.69429	11-12
13	-5.132	-30.734	1307.12485	-88.4	2.8	-81.7	50.2	59.76569	0.982	-81.6	57.0	53.6	3.5	3.5	119.96202	12-13
14	-4.854	-26.634	1324.75342	-88.4	4.0	-81.8	38.0	61.94106	0.990	-80.9	61.1	48.3	12.9	12.8	123.99114	13-14
15	-4.534	-22.284	1364.89455	-89.1	5.1	-81.8	29.5	63.48360	0.942	-80.0	65.4	43.0	22.6	22.2	144.66027	14-15
16	-4.154	-17.509	1431.94963	-89.4	6.1	-81.4	22.9	65.65452	0.871	-79.0	70.1	37.8	32.6	33.8	116.52527	15-16
17	-7.960	-16.941	1444.57292	-74.8	8.3	-82.0	30.7	67.01949	0.846	-84.2	70.9	37.0	34.1	33.8	116.52527	16-17
18	-12.606	-15.997	1484.91705	-60.3	11.4	-83.2	38.4	69.25432	0.796	-90.3	72.2	36.7	38.5	34.5	145.52616	17-18
19	-17.768	-14.584	1506.08665	-48.9	15.6	-85.2	45.0	72.48213	0.718	-96.4	74.1	37.1	45.4	34.0	161.69693	18-19
20	-23.879	-12.313	1686.71154	-40.5	21.9	-89.0	50.6	77.35213	0.601	-102.3	76.9	38.1	54.6	32.6	195.93129	19-20
21	-23.362	-18.879	1580.75383	-31.0	16.3	-84.5	57.8	73.45281	0.697	-101.2	70.8	43.2	47.0	19.8	182.86089	20-21
22	-23.112	-24.442	1420.46115	-17.2	10.0	-81.0	65.4	70.91915	0.757	-100.2	65.7	48.5	41.9	8.4	156.40847	21-22
23	-23.039	-29.618	1493.16064	-5.4	5.2	-78.0	74.3	69.27641	0.791	-99.4	61.1	53.7	39.3	-2.3	142.60412	22-23
24	-23.110	-34.521	1493.74371	9.0	-0.4	-74.9	83.6	68.31799	0.800	-98.7	56.8	58.9	39.4	-12.6	136.62214	23-24
25	-17.794	-34.517	1404.25700	12.1	0.3	-75.9	80.6	65.15337	0.895	-94.5	55.4	58.4	28.9	-8.4	161.02382	24-25
26	-13.139	-34.556	1348.25269	18.0	0.7	-77.4	76.9	62.88809	0.961	-90.2	54.3	58.3	19.2	-6.1	141.00467	25-26
27	-8.882	-34.625	1318.09526	34.4	1.1	-79.4	69.7	60.90356	0.994	-85.9	53.6	58.4	10.4	-5.3	128.93880	26-27
28	-5.378	-34.703	1309.55429	86.5	1.4	-81.4	64.4	58.54472	0.972	-82.2	53.1	58.8	5.8	-5.7	106.15829	27-28

JULY 31, 1964 13 HR 15 MIN 47 SEC 273 MS

TAB NO 82

ATLAS PHOTO NO 82

POD SEQUENCE NO 170

TRAJECTORY DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.444	-18.870	1420.63551	-20.7	6.7	-79.6	62.3	65.32837	0.896	-93.4	69.3	39.3	32.5	29.2	0.	0-1
2	-12.808	-25.857	1354.72896	-35.6	6.2	-80.5	54.4	64.38257	0.923	-90.2	62.6	47.5	22.6	13.6	210.98326	1-2
3	-8.691	-30.463	1305.21242	-22.6	3.1	-80.4	57.7	61.46974	0.996	-85.6	57.6	53.1	9.2	4.2	185.27200	2-3
4	-8.472	-26.286	1323.31468	-56.3	4.9	-81.1	46.7	62.59399	0.968	-85.2	61.7	47.7	15.6	13.7	125.27139	3-4
5	-8.240	-21.844	1364.59311	-68.8	6.7	-81.6	37.9	64.22095	0.919	-84.8	66.1	42.3	24.4	23.6	133.30342	4-5
6	-12.688	-21.195	1399.06485	-51.0	8.8	-81.8	45.8	66.17457	0.872	-90.3	67.1	42.1	29.7	23.8	136.09953	5-6
7	-17.586	-20.271	1463.43820	-39.0	11.8	-82.6	52.2	68.92129	0.801	-95.8	68.7	42.4	37.4	22.6	150.79285	6-7
8	-17.561	-25.277	1413.58746	-7.4	4.2	-78.3	69.9	65.47993	0.886	-94.9	59.6	53.1	28.6	1.7	134.13322	8-9
9	-17.617	-29.922	1391.36852	-11.2	3.5	-79.1	64.7	63.15640	0.952	-90.2	58.5	52.9	18.6	3.7	141.49640	9-10
10	-12.954	-30.221	1335.23604	-7.4	4.2	-78.3	69.9	65.47993	0.886	-94.9	59.6	53.1	28.6	1.7	134.13322	10-11
11	-8.691	-30.463	1305.21242	-22.6	3.1	-80.4	57.7	61.46974	0.996	-85.6	57.6	53.1	9.2	4.2	129.32330	11-12
12	-5.426	-34.582	1299.14330	-85.9	1.5	-81.4	63.9	58.06731	0.972	-82.2	53.2	58.8	5.7	-5.5	158.45324	12-13
13	-5.181	-30.643	1296.95633	-83.4	2.8	-81.7	50.1	59.30687	0.982	-81.6	57.1	53.6	3.6	3.6	119.01387	13-14
14	-4.905	-26.574	1314.61476	-88.2	4.0	-81.8	38.1	61.46675	0.990	-80.9	61.1	48.3	13.0	12.9	123.05768	14-15
15	-4.586	-22.256	1354.55815	-88.9	5.1	-81.7	29.6	63.00239	0.942	-80.0	65.4	43.0	22.6	22.4	130.71731	15-16
16	-4.209	-17.516	1421.13785	-89.2	6.1	-81.4	23.1	65.15819	0.871	-79.0	70.1	37.8	32.6	32.2	143.58045	16-17
17	-7.986	-16.951	1433.76421	-74.7	8.3	-82.0	30.8	66.51779	0.846	-84.2	70.9	37.0	34.1	33.8	115.65970	17-18
18	-12.598	-16.013	1473.83238	-60.3	11.4	-83.2	38.4	68.73742	0.797	-90.3	72.2	36.7	38.5	34.4	142.46018	18-19
19	-17.720	-14.614	1548.32254	-49.0	15.5	-85.2	45.0	71.93580	0.719	-96.4	74.0	37.1	45.3	33.9	160.42916	19-20
20	-23.778	-12.373	1673.01004	-40.6	21.8	-89.0	50.6	76.74856	0.602	-102.3	76.8	38.1	54.5	32.6	194.14934	20-21
21	-23.267	-18.879	1568.56355	-31.1	16.3	-84.5	57.6	72.88624	0.698	-101.2	70.8	43.2	47.0	19.9	181.52529	21-22
22	-23.018	-24.446	1508.59779	-19.3	10.8	-81.1	65.5	70.36824	0.758	-100.2	65.8	48.5	41.9	8.5	155.22841	22-23
23	-22.944	-29.530	1481.35941	-5.5	5.3	-78.1	74.1	68.72839	0.792	-99.4	61.2	53.7	39.3	-2.2	141.76818	23-24
24	-23.011	-34.390	1481.61139	8.9	-0.3	-75.0	83.3	67.76258	0.802	-98.7	56.9	58.9	39.3	-12.5	135.52584	24-25
25	-17.742	-34.392	1393.09583	11.8	0.3	-76.0	80.3	64.63534	0.895	-94.5	55.5	58.4	28.9	-8.3	159.58878	25-26
26	-13.125	-34.433	1337.61792	17.7	0.8	-77.5	76.5	62.39208	0.962	-90.2	54.4	58.3	19.2	-6.0	139.85464	26-27
27	-8.902	-34.503	1307.68538	33.7	1.2	-79.4	69.3	60.41330	0.994	-85.9	53.7	58.4	10.4	-5.2	127.92376	27-28
28	-5.426	-34.582	1299.14330	85.9	1.5	-81.4	63.9	58.06731	0.972	-82.2	53.2	58.8	5.7	-5.5	105.32238	28-29

RA-VII CAMEKA PA

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JULY 31, 1964 13 HR 15 MIN 52 SEC 393 MS

TAB NO 83 ATLAS PHOTO NO 83 POD SEQUENCE NO 172

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				596.407		1285.27161	-5.133	-32.115	3020.727	2.106	-72.021	116.559				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.435	-18.889	1409.51988	-20.9	6.7	-79.7	62.1	64.82701	0.896	-93.4	69.3	39.4	32.5	29.1	0.	0-1
2	-12.797	-25.800	1344.38336	-35.7	6.2	-80.5	54.3	63.89090	0.923	-90.2	62.7	47.5	22.7	13.6	208.77830	1-2
3	-8.712	-30.373	1295.04448	-23.0	3.1	-80.4	57.5	60.99090	0.996	-85.6	57.7	53.1	9.3	4.3	183.89638	2-3
4	-8.495	-26.227	1313.17967	-56.3	4.9	-81.1	46.6	62.11452	0.967	-85.2	61.8	47.7	15.7	13.8	124.32844	3-4
5	-8.264	-21.818	1354.25775	-68.8	6.7	-81.6	37.9	63.73437	0.919	-84.8	66.1	42.3	24.5	23.6	132.32301	4-5
6	-12.678	-21.173	1388.50014	-51.0	8.8	-81.8	45.7	65.67488	0.872	-90.3	67.2	42.1	29.7	23.8	135.07773	5-6
7	-17.538	-20.256	1452.31233	-39.1	11.8	-82.6	52.1	68.39735	0.801	-95.8	68.7	42.4	37.4	22.6	149.61816	6-7
8	-17.513	-25.224	1402.72925	-25.3	8.0	-80.4	60.3	66.34960	0.855	-95.3	64.0	47.7	31.6	12.0	143.47513	7-8
9	-17.567	-29.033	1388.48538	-7.5	4.2	-78.3	69.6	64.96753	0.886	-94.9	59.7	53.1	28.6	1.8	133.12580	8-9
10	-12.942	-30.131	1324.85716	-11.5	3.6	-79.1	64.4	62.66549	0.952	-90.2	58.5	52.9	18.6	3.8	140.36611	9-10
11	-8.712	-30.373	1295.04448	-23.0	3.1	-80.4	57.5	60.99090	0.996	-85.6	57.7	53.1	9.3	4.3	128.32178	10-11
12	-8.473	-36.460	1288.72627	85.2	1.5	-81.3	63.5	57.59009	0.972	-82.2	53.4	58.7	5.5	-5.4	157.21157	11-12
13	-9.229	-30.553	1286.77948	-82.7	2.8	-81.7	49.9	58.84782	0.982	-81.6	57.2	53.5	3.7	3.7	118.06556	12-13
14	-9.954	-26.514	1304.46638	-87.9	4.0	-81.8	38.1	60.99200	0.990	-80.9	61.2	48.3	13.0	12.9	122.12346	13-14
15	-9.638	-22.228	1344.21147	-88.8	5.1	-81.7	29.7	62.52070	0.942	-80.0	65.4	43.0	22.6	22.4	129.74625	14-15
16	-9.264	-17.524	1410.31630	-89.1	6.1	-81.3	23.2	64.66142	0.871	-79.0	70.1	37.8	32.6	32.2	142.50008	15-16
17	-8.012	-16.960	1422.94218	-74.7	8.3	-82.0	30.8	66.01548	0.846	-84.2	70.9	37.0	34.1	33.8	114.79303	16-17
18	-12.590	-16.029	1462.73099	-60.3	11.4	-83.2	38.4	68.21974	0.797	-90.3	72.1	36.7	38.5	34.4	141.39178	17-18
19	-17.671	-14.644	1536.53925	-49.0	15.5	-85.2	44.9	71.38858	0.719	-96.4	74.0	37.1	45.3	33.9	159.15883	18-19
20	-23.676	-12.432	1659.83113	-40.6	21.7	-88.9	50.5	76.14420	0.604	-102.3	76.7	38.1	54.3	32.5	192.36781	19-20
21	-23.171	-18.879	1556.35306	-31.2	16.2	-84.5	57.5	72.31873	0.699	-101.2	70.8	43.2	46.9	19.9	179.84408	20-21
22	-22.923	-24.400	1496.77518	-19.4	10.8	-81.1	65.3	69.81643	0.759	-100.2	65.8	48.5	41.8	8.6	154.04632	21-22
23	-22.848	-29.441	1469.54160	-5.7	5.3	-78.2	73.8	68.17962	0.793	-99.4	61.2	53.7	39.2	-2.1	140.68721	22-23
24	-22.911	-34.258	1469.46700	8.7	-0.2	-75.2	83.0	67.20663	0.803	-98.7	57.0	58.9	39.2	-12.3	134.42905	23-24
25	-17.690	-34.266	1381.92177	11.6	0.4	-76.1	80.0	64.11672	0.896	-94.5	55.6	58.4	28.8	-8.1	158.15375	24-25
26	-13.111	-34.310	1326.97185	17.3	0.8	-77.6	76.1	61.89555	0.962	-90.2	54.6	58.2	19.1	-5.9	138.70300	25-26
27	-8.921	-34.381	1297.26669	33.1	1.2	-79.5	68.9	59.92289	0.994	-85.9	53.8	58.4	10.3	-5.1	126.90707	26-27
28	-5.473	-34.460	1288.72627	85.2	1.5	-81.3	63.5	57.59009	0.972	-82.2	53.4	58.7	5.5	-5.4	104.48576	27-28

JULY 31, 1964 13 HR 15 MIN 57 SEC 513 MS

TAB NO 84 ATLAS PHOTO NO 84 POD SEQUENCE NO 174

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				591.287			1275.01129	-5.161	-32.058	3010.467	2.108	-71.979	116.552			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.426	-18.908	1398.39154	-21.1	6.7	-79.7	61.9	64.32504	0.896	-93.5	69.2	39.4	32.5	29.1	0.	0-1
2	-12.787	-25.744	1334.02444	-35.9	6.2	-80.5	54.1	63.99860	0.923	-90.2	62.8	47.5	22.7	13.7	206.57721	1-2
3	-8.733	-30.283	1284.86703	-23.5	3.1	-80.4	57.3	60.51162	0.996	-85.6	57.8	53.1	9.4	4.4	182.51847	2-3
4	-8.517	-26.169	1303.03221	-56.4	4.9	-81.1	46.5	61.63446	0.967	-85.2	61.8	47.7	15.7	13.9	123.38423	3-4
5	-8.288	-21.791	1343.90747	-68.8	6.7	-81.6	37.9	63.24710	0.918	-84.8	66.1	42.3	24.5	23.7	131.34073	4-5
6	-12.669	-21.150	1377.91940	-51.0	8.8	-81.8	45.6	65.17443	0.872	-90.3	67.2	42.0	29.7	23.8	134.05419	5-6
7	-17.491	-20.242	1441.17047	-39.2	11.8	-82.7	52.0	67.87265	0.802	-95.8	68.7	42.4	37.4	22.6	148.64225	6-7
8	-17.465	-25.171	1391.85719	-25.4	8.0	-80.5	60.2	65.83530	0.855	-95.3	64.0	47.7	31.6	12.1	142.40690	7-8
9	-17.518	-29.744	1369.59253	-7.8	4.3	-78.4	69.4	64.45480	0.886	-94.9	59.7	53.1	28.6	1.9	132.11700	8-9
10	-12.930	-30.042	1314.46819	-11.8	3.6	-79.2	64.2	62.17410	0.952	-90.2	58.6	52.9	18.6	3.9	139.23516	9-10
11	-8.733	-30.283	1284.86703	-23.5	3.1	-80.4	57.3	60.51162	0.996	-85.6	57.8	53.1	9.4	4.4	127.31910	10-11
12	-5.570	-34.339	1278.30467	84.5	1.5	-81.3	63.1	57.11317	0.972	-82.2	53.5	58.7	5.4	-5.3	155.96948	11-12
13	-5.278	-30.462	1276.59431	-82.0	2.8	-81.6	49.8	58.38848	0.982	-81.6	57.3	53.5	3.8	3.8	117.11710	12-13
14	-5.004	-26.455	1294.30684	-87.7	4.0	-81.8	38.1	60.51672	0.990	-80.9	61.3	48.3	13.1	13.0	121.18813	13-14
15	-4.690	-22.199	1333.85130	-88.6	5.1	-81.7	29.8	62.03840	0.942	-80.0	65.5	43.0	22.7	22.4	128.77348	14-15
16	-4.319	-17.531	1399.47957	-89.0	6.1	-81.3	23.3	64.16396	0.871	-79.0	70.1	37.8	32.6	32.2	141.41779	15-16
17	-8.038	-16.970	1412.10324	-74.6	8.3	-82.0	30.9	65.51239	0.846	-84.2	70.9	37.0	34.1	33.8	113.92488	16-17
18	-12.581	-16.046	1451.61151	-60.3	11.4	-83.2	38.4	67.70122	0.797	-90.3	72.1	36.7	38.5	34.4	140.32150	17-18
19	-17.623	-14.674	1524.73822	-49.1	15.5	-85.2	44.9	70.84054	0.720	-96.4	74.0	37.1	45.2	33.9	157.88729	18-19
20	-23.574	-12.491	1646.64064	-40.7	21.6	-88.9	50.5	75.53929	0.605	-102.3	76.7	38.1	54.2	32.5	190.58989	19-20
21	-23.075	-18.880	1544.12959	-31.2	16.1	-84.5	57.4	71.75061	0.700	-101.2	70.8	43.2	46.8	19.9	178.31583	20-21
22	-22.829	-24.354	1484.94200	-19.5	10.8	-81.2	65.1	69.26413	0.760	-100.2	65.8	48.5	41.7	8.6	152.86236	21-22
23	-22.752	-29.353	1457.71745	-5.9	5.3	-78.2	73.6	67.63056	0.794	-99.4	61.3	53.7	39.1	-1.9	139.60497	22-23
24	-22.811	-34.127	1497.32265	8.5	-0.1	-75.3	82.7	66.65069	0.804	-98.7	57.1	58.9	39.1	-12.1	133.33276	23-24
25	-17.637	-34.160	1370.74301	11.3	0.4	-76.2	79.6	63.59788	0.897	-94.5	55.7	58.4	28.7	-8.0	156.72126	24-25
26	-13.096	-34.187	1316.31981	17.0	0.8	-77.6	75.8	61.39874	0.962	-90.2	54.7	58.2	19.1	-5.7	137.55140	25-26
27	-8.941	-34.259	1286.84230	32.4	1.2	-79.5	68.5	59.43267	0.994	-85.9	53.9	58.4	10.3	-5.0	125.89007	26-27
28	-5.520	-34.339	1278.30467	84.5	1.5	-81.3	63.1	57.11317	0.972	-82.2	53.5	58.7	5.4	-5.3	103.64863	27-28

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JULY 31, 1964 13 HR 16 MIN 2 SEC 633 MS

TAB NO 85

ATLAS PHOTO NO 85

POD SEQUENCE NO 176

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.417	-18.928	1387.25011	-21.3	6.7	-79.8	61.7	63.82188	0.896	-93.5	69.2	39.4	32.4	29.0	0.	0-1
2	-12.776	-25.688	1323.63959	-36.0	6.3	-80.6	54.0	62.90507	0.922	-90.2	62.8	47.5	22.7	13.8	204.41348	1-2
3	-8.753	-30.194	1274.67567	-23.9	3.1	-80.4	57.1	60.03168	0.995	-85.6	57.9	53.1	9.4	4.4	181.13504	2-3
4	-8.539	-26.111	1292.86255	-56.4	5.0	-81.1	46.4	61.15336	0.967	-85.2	61.9	47.7	15.8	13.9	122.43740	3-4
5	-8.312	-21.766	1333.52611	-68.7	6.7	-81.6	37.9	62.75837	0.918	-84.8	66.2	42.3	24.5	23.7	130.35338	4-5
6	-12.659	-21.130	1367.30298	-51.1	8.8	-81.8	45.6	64.67230	0.872	-90.3	67.2	42.0	29.8	23.9	133.02645	5-6
7	-17.443	-20.229	1429.98758	-39.2	11.7	-82.7	52.0	67.34603	0.802	-95.8	68.7	42.4	37.4	22.7	147.26086	6-7
8	-17.467	-25.119	1380.95863	-25.6	8.0	-80.5	60.0	65.31959	0.856	-95.3	64.1	47.7	31.6	12.1	141.31375	7-8
9	-17.467	-29.656	1398.68034	-8.0	4.3	-79.5	69.1	63.94111	0.887	-94.9	59.8	53.1	28.5	2.0	131.10447	8-9
10	-12.917	-29.953	1304.06233	-12.1	3.1	-80.4	57.1	60.03168	0.995	-85.6	57.9	53.1	9.4	4.4	126.31451	10-11
11	-8.753	-30.194	1274.67567	-23.9	3.1	-80.4	57.1	60.03168	0.995	-85.6	57.9	53.1	9.4	4.4	126.31451	10-11
12	-5.566	-34.218	1267.88060	83.8	1.5	-81.3	62.7	56.63686	0.972	-82.2	53.6	58.7	5.3	-5.1	154.72640	11-12
13	-5.326	-30.373	1286.39819	-81.4	2.8	-81.6	49.6	57.92858	0.982	-81.6	57.4	53.5	3.9	3.9	116.16860	12-13
14	-5.054	-26.396	1284.12837	-87.5	4.0	-81.7	38.1	60.04057	0.989	-80.9	70.1	37.8	32.6	32.2	140.32845	15-16
15	-4.742	-22.173	1323.46390	-88.5	5.2	-81.6	29.9	61.55486	0.941	-80.0	65.5	43.0	22.7	22.5	127.79622	14-15
16	-4.373	-17.540	1388.60597	-88.9	6.2	-81.3	23.4	63.66487	0.871	-79.0	70.1	37.8	32.6	32.2	140.32845	15-16
17	-8.064	-16.982	1401.22276	-74.6	8.4	-82.0	30.9	65.00740	0.846	-84.2	70.9	37.0	34.1	33.7	113.05316	16-17
18	-12.572	-16.065	1440.44440	-60.3	11.4	-83.2	38.4	67.18048	0.797	-90.3	72.1	36.7	38.5	34.4	139.24553	17-18
19	-17.573	-14.706	1512.88208	-49.1	15.4	-85.2	44.8	70.28992	0.721	-96.4	73.9	37.1	45.2	33.9	156.60813	18-19
20	-23.471	-12.552	1633.38666	-40.7	21.5	-88.9	50.4	74.93146	0.607	-102.3	76.6	38.1	54.1	32.4	188.80297	19-20
21	-22.778	-18.882	1531.85930	-31.3	16.1	-84.5	57.3	71.18032	0.701	-101.2	70.8	43.2	46.8	19.9	176.81403	20-21
22	-22.773	-24.310	1473.07567	-19.6	10.7	-81.3	64.8	68.15566	0.762	-100.2	65.8	48.5	41.6	8.7	150.47309	21-22
23	-22.655	-29.266	1445.87271	-6.0	5.4	-78.4	73.1	66.53010	0.796	-99.4	61.4	53.7	38.9	-1.7	137.42894	22-23
24	-22.711	-33.998	1445.17119	8.3	0.0	-75.4	82.2	65.53817	0.807	-98.7	57.2	58.9	38.8	-11.7	131.13914	23-24
25	-17.585	-34.015	1359.55560	11.1	0.5	-76.3	79.3	63.07866	0.897	-94.5	55.9	58.4	28.6	-7.7	153.85959	24-25
26	-13.082	-34.065	1305.66026	16.6	0.9	-77.7	75.4	60.90159	0.962	-90.2	54.8	58.2	19.0	-5.5	135.24577	25-26
27	-8.960	-34.138	1276.41272	31.7	1.2	-79.5	68.1	58.94273	0.994	-85.9	54.2	58.4	10.2	-4.7	123.85272	26-27
28	-5.566	-34.218	1267.88060	83.8	1.5	-81.3	62.7	56.63686	0.972	-82.2	53.6	58.7	5.3	-5.1	102.81105	27-28

JULY 31, 1964 13 HR 16 MIN 7 SEC 752 MS

TAB NO 86

ATLAS PHOTO NO 86

POD SEQUENCE NO 178

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.407	-18.947	1376.09563	-21.4	6.7	-79.8	61.5	63.31790	0.896	-93.5	69.2	39.4	32.4	29.0	0.	0-1
2	-12.765	-25.634	1313.23708	-36.1	6.3	-80.6	53.9	62.41070	0.922	-90.2	62.9	47.5	22.8	13.8	202.26393	1-2
3	-8.774	-30.105	1264.47305	-24.4	3.1	-80.4	56.9	59.55120	0.995	-85.6	58.0	53.1	9.5	4.5	179.74816	2-3
4	-8.561	-26.054	1282.67699	-56.4	5.0	-81.1	46.3	60.67150	0.966	-85.2	62.0	47.7	15.9	14.0	121.48882	3-4
5	-8.336	-21.742	1323.12444	-68.7	6.7	-81.6	37.9	62.26869	0.918	-84.8	66.2	42.3	24.6	23.7	129.36314	4-5
6	-12.649	-21.109	1356.66403	-51.1	8.8	-81.9	45.5	64.16910	0.872	-90.3	67.2	42.0	29.8	23.9	131.99610	5-6
7	-17.394	-20.216	1418.78043	-39.3	11.7	-82.7	51.9	66.81825	0.802	-95.8	68.7	42.4	37.3	22.7	146.07658	6-7
8	-17.368	-25.068	1370.03673	-25.7	8.0	-80.6	59.9	64.80300	0.856	-95.3	64.1	47.7	31.6	12.2	140.25286	7-8
9	-17.417	-29.569	1347.75502	-8.2	4.3	-78.5	68.9	63.42681	0.887	-94.9	59.9	53.1	28.5	2.1	130.08977	8-9
10	-12.904	-29.865	1293.64377	-12.4	3.1	-80.4	56.9	59.55120	0.995	-85.6	58.0	53.1	9.5	4.5	153.48267	11-12
11	-8.774	-30.105	1264.47305	-24.4	3.1	-80.4	56.9	59.55120	0.995	-85.6	58.0	53.1	9.5	4.5	153.48267	11-12
12	-5.613	-34.098	1257.45215	83.1	1.5	-81.3	62.3	56.16090	0.971	-82.2	53.7	58.7	5.2	-5.0	115.21989	12-13
13	-5.373	-30.284	1256.19257	-80.9	2.8	-81.6	49.5	57.46826	0.982	-81.6	57.5	53.5	4.0	4.0	115.21989	12-13
14	-5.103	-26.337	1273.93597	-87.2	4.1	-81.7	38.1	59.56378	0.989	-80.9	61.4	48.3	13.2	13.1	119.31132	13-14
15	-4.793	-22.146	1313.05841	-88.4	5.2	-81.6	29.9	61.07049	0.941	-80.0	65.5	43.0	22.7	22.5	126.81633	14-15
16	-4.428	-17.549	1377.71007	-88.8	6.2	-81.3	23.5	63.16477	0.871	-79.0	70.1	37.8	32.6	32.2	139.23550	15-16
17	-8.090	-16.994	1390.31738	-74.5	8.4	-82.0	31.0	64.50127	0.846	-84.2	70.8	37.0	34.1	33.7	112.17932	16-17
18	-12.563	-16.084	1429.24966	-60.3	11.4	-83.2	38.4	66.65846	0.797	-90.3	72.1	36.7	38.5	34.4	138.16644	17-18
19	-17.524	-14.739	1500.99637	-49.1	15.4	-85.2	44.8	69.73793	0.721	-96.4	73.9	37.1	45.1	33.8	155.32571	18-19
20	-23.368	-12.614	1620.10481	-40.8	21.4	-88.8	50.3	74.32235	0.608	-102.3	76.5	38.1	54.0	32.4	187.01567	19-20
21	-22.881	-18.885	1519.56525	-31.4	16.0	-84.6	57.2	70.60893	0.702	-101.2	70.8	43.2	46.7	20.0	175.28804	20-21
22	-22.638	-24.266	1461.19131	-19.8	10.7	-81.3	64.8	68.15566	0.762	-100.2	65.8	48.5	41.6	8.8	150.47309	21-22
23	-22.559	-29.180	1434.01671	-6.2	5.4	-78.4	73.1	66.53010	0.796	-99.4	61.4	53.7	38.9	-1.7	137.42894	22-23
24	-22.611	-33.869	1433.01686	8.2	0.0	-75.5	82.2	65.53817	0.807	-98.7	57.2	58.9	38.8	-11.7	131.13914	23-24
25	-17.532	-33.891	1348.36174	10.9	0.5	-76.4	79.0	62.55916	0.898	-94.5	55.9	58.4	28.6	-7.7	153.85959	24-25
26	-13.067	-33.944	1294.99379	16.2	0.9	-77.8	75.0	60.40411	0.963	-90.2	54.9	58.2	19.0	-5.5	135.24577	25-26
27	-8.978	-34.018	1265.97714	31.0	1.2	-79.5	67.7	58.45295	0.994	-85.9	54.2	58.4	10.2	-4.7	123.85272	26-27
28	-5.613	-34.098	1257.45215	83.1	1.5	-81.3	62.3	56.16090	0.971	-82.2	53.7	58.7	5.2	-5.0	101.97294	27-28

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JULY 31, 1964 13 HR 16 MIN 12 SEC 872 MS TAB NO 87 ATLAS PHOTO NO 87 POD SEQUENCE NO 180

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				575.927		1244.16745	-5.247	-31.885	2979.623	2.116	-71.853	116.529		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-11.398	-18.966	1364.92772	-21.6	6.7	-79.9	61.4	62.81329	0.896	-93.5	69.2	39.4	32.3	29.0
2	-12.753	-25.579	1302.82054	-36.3	6.3	-80.6	53.7	61.91566	0.922	-90.2	62.9	47.5	22.8	13.9
3	-8.794	-30.017	1254.26004	-24.8	3.1	-80.4	56.6	59.07024	0.995	-85.6	58.1	53.1	9.5	4.6
4	-8.583	-25.997	1272.7824	-56.5	5.0	-81.1	46.3	60.18902	0.966	-85.2	62.0	47.7	15.9	14.1
5	-8.360	-21.718	1312.70731	-68.6	6.7	-81.6	37.9	61.77829	0.918	-84.8	66.2	42.3	24.6	23.7
6	-12.639	-21.089	1346.00862	-51.2	8.8	-81.9	45.5	63.66512	0.872	-90.3	67.2	42.0	29.8	23.9
7	-17.346	-20.204	1407.55698	-39.4	11.7	-82.7	51.8	66.28971	0.802	-95.8	68.7	42.4	37.3	22.7
8	-17.319	-25.018	1359.10292	-25.8	8.0	-80.6	59.7	64.28575	0.856	-95.3	64.1	47.7	31.6	12.3
9	-17.367	-29.482	1336.81924	-8.4	4.3	-78.6	66.7	62.91203	0.887	-94.9	60.0	53.1	28.5	2.2
10	-12.891	-29.777	1283.21422	-12.7	3.6	-79.3	63.4	60.69583	0.952	-90.2	58.9	52.9	18.7	4.1
11	-8.794	-30.017	1254.26004	-24.8	3.1	-80.4	56.6	59.07024	0.995	-85.6	58.1	53.1	9.5	4.6
12	-5.659	-33.977	1247.01804	82.3	1.5	-81.2	61.9	55.68515	0.971	-82.2	53.8	58.7	5.1	-4.9
13	-5.461	-30.195	1245.97774	-80.3	2.8	-81.5	49.4	57.00761	0.982	-81.6	57.6	53.5	4.0	4.0
14	-5.153	-26.279	1263.73167	-87.0	4.1	-81.7	38.1	59.08644	0.989	-80.9	61.4	48.2	13.3	13.2
15	-4.845	-22.120	1302.63885	-88.2	5.2	-81.6	30.0	60.58547	0.941	-80.0	65.6	43.0	22.8	22.6
16	-4.482	-17.559	1366.79874	-88.7	6.2	-81.3	23.7	62.66398	0.871	-79.0	70.1	37.8	32.6	32.2
17	-8.115	-17.006	1379.39482	-74.5	8.4	-81.9	31.0	63.99434	0.846	-84.2	70.8	37.0	34.1	33.7
18	-12.553	-16.103	1418.03679	-60.3	11.4	-83.2	38.4	66.13560	0.797	-90.3	72.1	36.7	38.4	34.4
19	-17.474	-14.773	1489.09309	-49.2	15.3	-85.2	44.8	69.18512	0.722	-96.4	73.8	37.1	45.1	33.8
20	-23.265	-12.677	1606.81206	-40.8	21.3	-88.8	50.3	73.71273	0.610	-102.3	76.5	38.1	53.9	32.3
21	-22.784	-18.888	1507.25809	-31.5	16.0	-84.6	57.1	70.03694	0.703	-101.2	70.7	43.2	46.6	20.0
22	-22.542	-24.223	1449.29593	-19.9	10.7	-81.4	64.6	67.60050	0.762	-100.2	65.9	48.5	41.5	8.9
23	-22.462	-29.094	1422.15352	-6.3	5.4	-78.5	72.9	65.97929	0.796	-99.4	61.5	53.7	38.9	-1.5
24	-22.511	-33.741	1420.86148	8.0	0.1	-75.7	81.9	64.98182	0.808	-98.7	57.3	58.9	38.7	-11.6
25	-17.478	-33.767	1337.16208	10.6	0.6	-76.5	78.6	62.03939	0.898	-94.5	56.0	58.4	28.5	-7.5
26	-13.052	-33.822	1284.32025	15.9	0.9	-77.8	74.7	59.90631	0.963	-90.2	55.0	58.2	18.9	-5.3
27	-8.997	-33.898	1255.53481	30.4	1.2	-79.5	67.3	57.96327	0.994	-85.9	54.3	58.4	10.1	-4.6
28	-5.659	-33.977	1247.01804	82.3	1.5	-81.2	61.9	55.68515	0.971	-82.2	53.8	58.7	5.1	-4.9

JULY 31, 1964 13 HR 16 MIN 17 SEC 992 MS TAB NO 88 ATLAS PHOTO NO 88 POD SEQUENCE NO 182

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				570.807		1233.86530	-5.277	-31.826	2969.321	2.119	-71.811	116.522				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.389	-18.985	1353.74687	-21.8	6.7	-79.9	61.2	62.30729	0.896	-93.5	69.2	39.5	32.3	28.9	0.	0-1
2	-12.741	-25.525	1292.37712	-36.4	6.3	-80.6	53.6	61.41934	0.922	-90.2	63.0	47.5	22.8	13.9	197.99048	1-2
3	-8.814	-29.929	1244.03180	-25.2	3.2	-80.4	56.4	58.58856	0.995	-85.6	58.2	53.1	9.6	4.7	176.96414	2-3
4	-8.605	-25.941	1262.25888	-56.5	5.0	-81.1	46.2	59.70557	0.966	-85.2	62.1	47.7	16.0	14.1	119.518677	3-4
5	-8.383	-21.695	1302.26405	-68.6	6.7	-81.6	37.9	61.28667	0.917	-84.8	66.2	42.3	24.6	23.8	127.37506	4-5
6	-12.628	-21.071	1335.31990	-51.2	8.8	-81.9	45.4	63.15957	0.872	-90.3	67.3	42.0	29.8	23.9	129.92762	5-6
7	-17.296	-20.194	1396.29192	-39.4	11.7	-82.8	51.7	65.75921	0.803	-95.8	68.7	42.4	37.3	22.7	143.69898	6-7
8	-17.269	-24.968	1348.13533	-26.0	8.0	-80.7	59.6	63.76691	0.856	-95.3	64.2	47.7	31.5	12.3	138.08489	7-8
9	-17.315	-29.396	1325.85680	-8.6	4.4	-78.7	68.4	62.39600	0.887	-94.9	60.0	53.1	28.4	2.3	128.05364	8-9
10	-12.877	-29.690	1272.76382	-12.9	3.7	-79.3	63.2	60.20155	0.952	-90.2	59.0	52.9	18.7	4.2	134.69150	9-10
11	-8.814	-29.929	1244.03180	-25.2	3.2	-80.4	56.4	58.58856	0.995	-85.6	58.2	53.1	9.6	4.7	123.29100	10-11
12	-5.705	-33.858	1236.57944	81.6	1.5	-81.2	61.5	55.20973	0.971	-82.2	54.0	58.7	5.0	-4.8	150.99261	11-12
13	-5.468	-30.106	1235.75272	-79.8	2.8	-81.5	49.3	56.54646	0.983	-81.6	57.7	53.5	4.1	-4.1	113.32180	12-13
14	-5.202	-26.222	1253.51212	-86.8	4.1	-81.6	38.1	58.60838	0.989	-80.9	61.5	48.2	13.3	13.3	117.42891	13-14
15	-4.896	-22.095	1292.19916	-88.1	5.2	-81.6	30.1	60.09954	0.941	-80.0	65.6	43.0	22.8	22.6	124.85005	14-15
16	-4.536	-17.570	1355.86208	-88.7	6.3	-81.2	23.8	62.16208	0.871	-79.0	70.1	37.8	32.6	32.2	137.04181	15-16
17	-8.140	-17.020	1368.44009	-74.5	8.4	-81.9	31.1	63.48596	0.847	-84.2	70.8	37.0	34.1	33.7	110.42589	16-17
18	-12.543	-16.124	1406.78310	-60.3	11.4	-83.2	38.4	65.61085	0.798	-90.3	72.1	36.7	38.4	34.4	135.99875	17-18
19	-17.473	-14.808	1477.13895	-49.2	15.3	-85.2	44.7	68.62995	0.723	-96.4	73.8	37.1	45.0	33.8	152.75030	18-19
20	-23.161	-12.741	1593.45673	-40.9	21.1	-88.8	50.2	73.10023	0.612	-102.3	76.4	38.1	53.8	32.2	183.63814	19-20
21	-22.686	-18.893	1494.89975	-31.6	15.9	-84.6	57.0	69.46256	0.704	-101.2	70.7	43.2	46.5	20.0	172.62647	20-21
22	-22.445	-24.181	1437.35901	-20.0	10.7	-81.4	64.5	67.04341	0.763	-100.2	65.9	48.4	41.5	9.0	148.08659	21-22
23	-22.364	-29.010	1410.25778	-6.5	5.5	-78.6	72.7	65.42701	0.797	-99.4	61.5	53.7	38.8	-1.4	135.24292	22-23
24	-22.409	-33.614	1408.68303	7.8	0.2	-75.8	81.6	64.42447	0.810	-98.7	57.4	58.9	38.6	-11.4	128.94420	23-24
25	-17.424	-33.644	1325.94319	10.4	0.6	-76.6	78.3	61.51876	0.899	-94.5	56.1	58.4	28.4	-7.4	151.00156	24-25
26	-13.036	-33.702	1273.63229	15.5	1.0	-77.9	74.3	59.40784	0.963	-90.2	55.1	58.2	18.9	-5.2	132.93660	25-26
27	-9.015	-33.778	1245.08316	29.7	1.3	-79.6	66.9	57.47333	0.993	-85.9	54.4	58.4	10.1	-4.5	121.81090	26-27
28	-5.705	-33.858	1236.57944	81.6	1.5	-81.2	61.5	55.20973	0.971	-82.2	54.0	58.7	5.0	-4.8	100.29474	27-28

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JULY 31, 1964 13 HR 16 MIN 23 SEC 112 MS

TAB NO 89

ATLAS PHOTO NO 89

POD SEQUENCE NO 184

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				565.687	1223.55243	-5.306	-31.767	2959.008	2.122	-71.768	116.514					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.380	-19.004	1342.55266	-22.0	6.7	-80.0	61.0	61.80048	0.896	-93.5	69.1	39.5	32.2	28.9	0.	0-1
2	-12.729	-25.471	1281.91679	-36.5	6.3	-80.7	53.5	60.92222	0.922	-90.2	63.0	47.5	22.8	14.0	195.86989	1-2
3	-8.833	-29.841	1233.79196	-25.6	3.2	-80.4	56.2	58.10633	0.995	-85.6	58.3	53.1	9.7	4.8	175.56612	2-3
4	-8.626	-25.884	1252.02458	-56.6	5.0	-81.1	46.1	59.22142	0.965	-85.2	62.1	47.7	16.0	14.2	118.63308	3-4
5	-8.405	-21.671	1291.80293	-68.6	6.8	-81.6	37.9	60.79422	0.917	-84.8	66.3	42.3	24.6	23.8	126.37685	4-5
6	-12.617	-21.052	1324.61104	-51.3	8.8	-81.9	45.4	62.65307	0.872	-90.3	67.3	42.0	29.8	24.0	128.88876	5-6
7	-17.246	-20.183	1385.00522	-39.5	11.6	-82.8	51.6	65.22769	0.803	-95.8	68.7	42.3	37.3	22.7	142.50434	6-7
8	-17.218	-24.919	1337.14966	-26.1	8.0	-80.7	59.4	63.24721	0.856	-95.3	64.2	47.7	31.5	12.4	136.99498	7-8
9	-17.263	-29.310	1314.88042	-8.8	4.4	-78.7	68.2	61.87932	0.888	-94.9	60.1	53.1	28.4	2.4	127.03174	8-9
10	-12.863	-29.603	1262.30020	-13.2	3.7	-79.4	63.0	59.70663	0.952	-90.2	59.0	52.9	18.7	4.3	133.55028	9-10
11	-8.833	-29.841	1233.79196	-25.6	3.2	-80.4	56.2	58.10633	0.995	-85.6	58.3	53.1	9.7	4.8	122.27927	10-11
12	-5.750	-33.738	1226.13516	-80.7	1.5	-81.2	61.1	54.73450	0.971	-82.2	54.1	58.7	4.7	-4.6	149.74617	11-12
13	-5.515	-30.018	1225.51802	-79.3	2.8	-81.5	49.1	56.08491	0.983	-81.6	57.8	53.5	4.2	-4.6	112.37232	12-13
14	-5.250	-26.164	1243.27972	-86.6	4.1	-81.6	38.1	58.12973	0.988	-80.9	61.6	48.2	13.4	13.3	116.48553	13-14
15	-4.947	-22.070	1281.74393	-88.0	5.3	-81.5	30.2	59.61290	0.941	-80.0	65.6	43.0	22.8	22.6	123.86338	14-15
16	-4.589	-17.580	1344.90770	-88.6	6.3	-81.2	23.9	61.65939	0.871	-79.0	70.1	37.8	32.5	32.2	135.94046	15-16
17	-8.165	-17.034	1357.46490	-74.4	8.4	-81.9	31.2	62.97663	0.847	-84.2	70.8	37.0	34.1	33.7	109.54589	16-17
18	-12.532	-16.145	1395.50641	-60.3	11.3	-83.2	38.4	65.08503	0.798	-90.3	72.0	36.7	38.4	34.3	134.90947	17-18
19	-17.372	-14.843	1465.16037	-49.2	15.2	-85.2	44.7	68.07365	0.723	-96.4	73.7	37.1	44.9	33.7	151.45590	18-19
20	-23.056	-12.805	1580.08015	-40.9	21.0	-88.7	50.2	72.48675	0.613	-102.3	76.3	38.1	53.6	32.1	181.64495	19-20
21	-22.587	-18.898	1482.52051	-31.7	15.7	-84.6	56.8	68.88721	0.705	-101.2	70.7	43.2	46.4	20.0	170.68873	20-21
22	-22.340	-24.139	1425.40475	-20.1	10.7	-81.5	64.1	66.48552	0.764	-100.2	65.9	48.4	41.3	9.1	146.85948	21-22
23	-22.266	-28.925	1398.34961	-6.6	5.5	-78.7	72.4	64.87415	0.798	-99.4	61.6	53.7	38.6	-1.3	134.14702	22-23
24	-22.308	-33.487	1396.49886	7.6	0.2	-75.9	81.3	63.86687	0.811	-98.7	57.6	58.9	38.4	-11.2	127.84552	23-24
25	-17.370	-33.522	1314.71561	10.2	0.7	-76.7	78.0	60.99774	0.900	-94.5	56.2	58.4	28.4	-7.2	149.57227	24-25
26	-13.019	-33.581	1262.93559	15.2	1.0	-77.9	73.9	58.90897	0.963	-90.2	55.2	58.2	18.8	-5.0	131.77961	25-26
27	-9.032	-33.658	1234.62399	29.0	1.3	-79.6	66.5	56.98339	0.993	-85.9	54.5	58.4	10.0	-4.3	120.78794	26-27
28	-5.750	-33.738	1226.13516	80.7	1.5	-81.2	61.1	54.73450	0.971	-82.2	54.1	58.7	4.7	-4.6	99.45454	27-28

JULY 31, 1964 13 HR 16 MIN 28 SEC 232 MS

TAB NO 90

ATLAS PHOTO NO 90

POD SEQUENCE NO 186

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				560.567	1213.22888	-5.335	-31.708	2948.684	2.125	-71.725	116.506					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.370	-19.023	1331.34499	-22.1	6.7	-80.0	60.8	61.29305	0.896	-93.5	69.1	39.5	32.2	28.9	0.	0-1
2	-12.716	-25.418	1271.44257	-36.7	6.3	-80.7	53.3	60.42444	0.921	-90.2	63.1	47.5	22.9	14.1	193.75194	1-2
3	-8.852	-29.754	1223.54164	-26.1	3.2	-80.4	56.0	57.62361	0.995	-85.6	58.4	53.1	9.7	4.9	174.16580	2-3
4	-8.647	-25.828	1241.77705	-56.6	5.0	-81.1	46.0	58.73664	0.965	-85.2	62.2	47.7	16.1	14.2	117.67806	3-4
5	-8.428	-21.648	1281.32637	-68.6	6.8	-81.5	37.9	60.30104	0.917	-84.8	66.3	42.3	24.7	23.8	125.37676	4-5
6	-12.606	-21.033	1313.88596	-51.3	8.8	-81.9	45.3	62.14581	0.872	-90.3	67.3	42.0	29.8	24.0	127.84829	5-6
7	-17.196	-20.173	1373.70270	-39.6	11.6	-82.8	51.5	64.69543	0.803	-95.8	68.7	42.3	37.2	22.8	141.30877	6-7
8	-17.168	-24.869	1326.15045	-26.2	8.0	-80.8	59.2	62.72688	0.856	-95.3	64.3	47.7	31.5	12.4	135.90304	7-8
9	-17.211	-29.224	1303.89381	-9.0	4.4	-78.8	68.0	61.36216	0.888	-94.9	60.2	53.1	28.4	2.5	126.00840	8-9
10	-12.849	-29.516	1251.82561	-13.5	3.7	-79.4	62.7	59.21120	0.952	-90.2	59.1	52.9	18.7	4.4	121.26648	9-10
11	-8.852	-29.754	1223.54164	-26.1	3.2	-80.4	56.0	57.62361	0.995	-85.6	58.4	53.1	9.7	4.9	148.49899	10-11
12	-5.795	-33.619	1215.68489	-79.9	1.5	-81.2	60.8	54.25945	0.971	-82.2	54.2	58.7	4.7	-4.5	111.42255	11-12
13	-5.562	-29.929	1215.27391	-78.9	2.9	-81.5	49.0	55.62299	0.983	-81.6	57.9	53.5	4.3	4.3	111.42255	12-13
14	-5.299	-26.107	1233.03526	-86.4	4.1	-81.6	38.1	57.65053	0.988	-80.9	61.6	48.2	13.4	13.4	115.54094	13-14
15	-4.997	-22.045	1271.27460	-87.8	5.3	-81.5	30.3	59.12561	0.940	-80.0	65.6	43.0	22.8	22.6	122.87501	14-15
16	-4.643	-17.591	1333.93790	-88.5	6.3	-81.2	24.0	61.15600	0.871	-79.0	70.1	37.8	32.5	32.2	134.83734	15-16
17	-8.190	-17.048	1346.47278	-74.4	8.4	-81.9	31.2	62.46653	0.847	-84.2	70.8	37.0	34.1	33.7	108.66453	16-17
18	-12.522	-16.167	1384.21201	-60.3	11.3	-83.2	38.4	64.55838	0.798	-90.3	72.0	36.7	38.4	34.3	133.81838	17-18
19	-17.321	-14.878	1453.16512	-49.3	15.2	-85.2	44.7	67.51656	0.724	-96.4	73.7	37.1	44.9	33.7	150.16069	18-19
20	-22.951	-12.869	1566.69429	-41.0	20.9	-88.7	50.1	71.87285	0.615	-102.3	76.3	38.1	53.6	32.1	179.85623	19-20
21	-22.481	-18.903	1470.12935	-31.7	15.7	-84.6	56.8	68.31131	0.706	-101.2	70.7	43.2	46.4	20.0	169.15185	20-21
22	-22.251	-24.097	1413.44019	-20.2	10.6	-81.5	64.1	65.92716	0.765	-100.2	65.9	48.4	41.3	9.1	145.64884	21-22
23	-22.167	-28.841	1386.43481	-6.8	5.5	-78.8	72.2	64.32100	0.799	-99.4	61.6	53.7	38.6	-1.2	133.04664	22-23
24	-22.206	-33.360	1384.31387	7.5	0.3	-76.0	81.0	63.30924	0.812	-98.7	57.6	58.9	38.4	-11.0	126.74709	23-24
25	-17.315	-33.399	1303.48228	9.9	0.7	-76.8	77.6	60.47645	0.900	-94.5	56.3	58.4	28.3	-7.1	148.14573	24-25
26	-13.003	-33.461	1252.23174	14.8	1.0	-78.0	73.6	58.40976	0.964	-90.2	55.4	58.2	18.8	-5.0	130.62277	25-26
27	-9.050	-33.539	1224.15787	28.3	1.3	-79.6	66.1	56.49351	0.993	-85.9	54.7	58.4	10.0	-4.2	119.76417	26-27
28	-5.795	-33.619	1215.68489	79.9	1.5	-81.2	60.8	54.25945	0.971	-82.2	54.2	58.7	4.7	-4.5	98.61371	27-28

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JULY 31, 1964 13 HR 16 MIN 33 SEC 352 MS

TAB NO 91 ATLAS PHOTO NO 91 POD SEQUENCE NO 188

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
PHOTO DATA				555.447		1202.89435		-5.365		-31.648		2938.350		2.127		-71.681		116.499	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.361	-19.042	1320.12363	-22.3	6.7	-80.0	60.6	60.78416	0.896	-93.5	69.1	39.5	32.2	28.8	0.	0-1			
2	-12.702	-25.365	1260.94261	-36.8	6.3	-80.7	53.2	59.92544	0.921	-90.2	63.1	47.5	22.9	14.1	191.63385	1-2			
3	-8.870	-29.666	1213.27528	-26.5	3.2	-80.4	55.8	57.14014	0.994	-85.6	58.4	53.1	9.8	5.0	172.76036	2-3			
4	-8.666	-25.772	1231.51125	-56.7	5.0	-81.1	45.9	58.25099	0.965	-85.2	62.2	47.7	16.2	14.3	116.72130	3-4			
5	-8.450	-21.626	1270.82971	-68.5	6.8	-81.5	37.9	59.80692	0.917	-84.8	66.3	42.3	24.7	23.8	124.37442	4-5			
6	-12.593	-21.015	1303.13263	-51.4	8.8	-81.9	45.3	61.63721	0.871	-90.3	67.3	42.0	29.8	24.0	126.80343	5-6			
7	-17.145	-20.163	1362.36282	-39.7	11.6	-82.8	51.4	64.16140	0.804	-95.8	68.7	42.3	37.2	22.8	140.10649	6-7			
8	-17.116	-24.820	1315.11737	-24.4	8.0	-80.8	59.1	62.20494	0.857	-95.3	64.3	47.7	31.5	12.5	134.80679	7-8			
9	-17.158	-29.138	1292.87485	-9.2	4.4	-79.2	67.7	60.64358	0.888	-94.9	60.2	53.1	28.3	2.6	124.98168	8-9			
10	-12.833	-29.430	1241.32805	-13.8	3.7	-79.5	62.5	58.71469	0.951	-90.2	59.2	52.9	18.7	4.5	131.26141	9-10			
11	-8.870	-29.666	1213.27528	-26.5	3.2	-80.4	55.8	57.14014	0.994	-85.6	58.4	53.1	9.8	5.0	120.25032	10-11			
12	-5.839	-33.499	1205.22748	79.1	1.5	-81.2	60.4	53.78443	0.971	-82.2	54.3	58.7	4.6	-4.4	147.25043	11-12			
13	-5.607	-29.841	1205.01984	-78.5	2.9	-81.5	48.9	55.16064	0.983	-81.6	57.9	53.5	4.4	4.4	110.47236	12-13			
14	-5.346	-26.049	1222.77890	-86.2	4.1	-81.6	38.1	57.17076	0.988	-80.9	61.7	48.2	13.5	13.4	145.59523	13-14			
15	-5.047	-22.020	1260.79205	-87.7	5.3	-81.5	30.4	58.63772	0.940	-80.0	65.7	43.0	22.9	22.7	121.88519	14-15			
16	-4.696	-17.603	1322.95454	-88.4	6.3	-81.2	24.1	60.65202	0.872	-79.0	70.1	37.8	32.5	32.2	133.73298	15-16			
17	-8.213	-17.062	1335.45926	-74.3	8.4	-81.9	31.3	61.95546	0.847	-84.2	70.8	37.0	34.1	33.7	107.78084	16-17			
18	-12.510	-16.189	1372.88704	-60.3	11.3	-83.2	38.4	64.03033	0.798	-90.3	72.0	36.7	38.3	34.3	132.72241	17-18			
19	-17.268	-14.915	1441.12907	-49.3	15.1	-85.2	44.6	66.95759	0.725	-96.4	73.7	37.1	44.9	33.7	148.85786	18-19			
20	-22.845	-12.935	1553.25687	-41.0	20.8	-88.7	50.0	71.25657	0.617	-102.3	76.2	38.1	53.5	32.1	178.05803	19-20			
21	-22.387	-18.909	1457.69040	-31.8	15.7	-84.7	56.7	67.13319	0.707	-101.2	70.7	43.2	46.3	20.1	167.60925	20-21			
22	-22.152	-24.056	1401.43248	-20.4	10.6	-81.6	64.0	65.36678	0.766	-100.2	65.9	48.4	41.2	9.2	144.43253	21-22			
23	-22.067	-28.757	1374.48161	-6.9	5.5	-78.9	72.0	63.76609	0.800	-99.4	61.7	53.7	38.5	-11.0	131.94339	22-23			
24	-22.103	-33.234	1372.09592	7.3	0.4	-76.1	80.6	62.75015	0.813	-98.7	57.7	58.9	38.3	-10.9	125.64595	23-24			
25	-17.259	-33.277	1292.22260	9.7	0.8	-76.9	73.3	59.95396	0.901	-94.5	56.4	58.4	28.2	-7.0	146.71358	24-25			
26	-12.986	-33.340	1241.50824	14.5	1.1	-78.1	73.2	57.90966	0.964	-90.2	55.5	58.2	18.7	-4.8	129.46135	25-26			
27	-9.066	-33.419	1213.67865	27.7	1.3	-79.6	65.7	56.00295	0.993	-85.9	54.9	58.4	10.0	-4.1	118.73748	26-27			
28	-5.839	-33.499	1205.22748	79.1	1.5	-81.2	60.4	53.78443	0.971	-82.2	54.3	58.7	4.6	-4.4	97.77172	27-28			

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TAB NO 92 ATLAS PHOTO NO 92 POD SEQUENCE NO 190

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				550.328	1192.54916	-5.395	-31.588	2928.004	2.130	-71.638	116.491					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.352	-19.062	1308.88892	-22.5	6.7	-80.1	60.4	60.27456	0.896	-93.5	69.1	39.5	32.1	28.8	0.	0-1
2	-12.688	-25.311	1250.42746	-36.9	6.3	-80.7	53.1	59.42571	0.921	-90.2	63.2	47.5	22.9	14.2	189.51825	1-
3	-8.888	-29.578	1202.97785	-26.9	3.2	-80.4	55.6	56.65613	0.994	-85.6	58.5	53.1	9.8	5.1	171.35220	2-3
4	-8.686	-25.717	1221.23160	-56.7	5.0	-81.1	45.9	57.76669	0.965	-85.2	62.3	47.7	16.2	14.4	115.76313	3-4
5	-8.471	-21.603	1260.31706	-68.5	6.8	-81.5	37.9	59.31206	0.916	-84.8	66.3	42.3	24.7	23.9	123.37017	4-5
6	-12.580	-20.997	1292.36169	-51.4	8.8	-81.9	45.2	61.12777	0.871	-90.3	67.3	42.0	29.8	24.0	125.75677	5-6
7	-17.093	-20.153	1351.00481	-39.8	11.6	-82.8	51.3	63.62652	0.804	-95.8	68.7	42.3	37.2	22.8	138.90237	6-7
8	-17.064	-24.771	1304.06870	-26.5	8.0	-80.9	58.9	61.68227	0.857	-95.3	64.3	47.7	31.5	12.6	133.70823	7-8
9	-17.104	-29.051	1281.84756	-9.4	4.4	-78.9	67.5	60.32443	0.889	-94.9	60.3	53.1	28.3	2.7	123.95331	8-9
10	-12.818	-29.343	1230.81827	-14.0	3.7	-79.5	62.2	58.21760	0.951	-90.2	59.3	52.9	18.7	4.6	130.11332	9-10
11	-8.888	-29.578	1202.97785	-26.9	3.2	-80.4	55.6	56.65613	0.994	-85.6	58.5	53.1	9.8	5.1	119.23277	10-11
12	-5.883	-33.379	1194.76395	78.2	1.5	-81.1	60.0	53.30955	0.971	-82.2	54.5	58.7	4.5	-4.3	146.00094	11-12
13	-5.653	-29.752	1194.75627	-78.1	2.9	-81.4	48.7	54.69791	0.983	-81.6	58.0	53.5	4.5	4.5	109.52182	12-13
14	-5.394	-25.992	1212.51044	-86.0	4.1	-81.5	38.1	56.69043	0.988	-80.9	61.8	48.2	13.6	13.5	113.64833	13-14
15	-5.097	-21.995	1230.29541	-87.6	5.3	-81.5	30.4	58.14917	0.940	-80.0	65.7	43.0	22.9	22.7	120.89363	14-15
16	-4.748	-17.614	1311.95584	-88.3	6.4	-81.1	24.3	60.14735	0.872	-79.0	70.0	37.8	32.5	32.2	132.67686	15-16
17	-8.237	-17.077	1324.42824	-74.3	8.4	-81.9	31.3	61.44359	0.847	-84.2	70.8	37.0	34.1	33.7	106.89563	16-17
18	-12.498	-16.211	1361.54285	-60.3	11.3	-83.2	38.4	63.50137	0.799	-90.3	72.0	36.7	38.3	34.3	131.62428	17-18
19	-17.215	-14.951	1429.07379	-49.4	15.1	-85.2	44.6	66.39772	0.725	-96.4	73.6	37.1	44.8	33.7	147.55355	18-19
20	-22.738	-13.000	1539.80580	-41.1	20.7	-88.7	50.0	70.63967	0.618	-102.3	76.1	38.1	53.3	32.0	176.26303	19-20
21	-22.286	-18.915	1445.23581	-31.9	15.6	-84.7	56.6	67.15434	0.708	-101.2	70.6	43.2	46.2	20.1	166.06682	20-21
22	-22.053	-24.015	1389.41112	-20.5	10.6	-81.6	63.8	64.80577	0.767	-100.2	66.0	48.4	41.2	9.3	143.21422	21-22
23	-21.967	-28.673	1362.51860	-7.1	5.5	-78.9	71.7	63.21073	0.801	-99.4	61.7	53.7	38.4	-0.9	130.83854	22-23
24	-21.999	-33.108	1359.87395	7.1	0.4	-76.3	80.3	62.19088	0.815	-98.7	57.8	58.9	38.1	-10.7	124.54471	23-24
25	-17.203	-33.154	1280.95512	9.5	0.8	-76.9	76.9	59.43112	0.902	-94.5	56.5	58.4	28.1	-6.8	145.28337	24-25
26	-12.968	-33.220	1230.77632	14.1	1.1	-78.1	72.8	57.40916	0.964	-90.2	55.6	58.2	18.7	-4.7	128.29953	25-26
27	-9.082	-33.300	1203.19189	27.0	1.3	-79.6	65.3	55.51236	0.993	-85.9	54.9	58.4	9.9	-4.0	117.70985	26-27
28	-5.883	-33.379	1194.76395	78.2	1.5	-81.1	60.0	53.30955	0.971	-82.2	54.5	58.7	4.5	-4.3	96.92890	27-28

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TAB NO 93

ATLAS PHOTO NO 93

POD SEQUENCE NO 192

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LUN	R	V	PTH	AZ	
PHOTO DATA								545.208	1182.19308	-5.425	-31.527	2917.648	2.133	-71.594	116.483	
PT	LAT	LUN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.343	-19.081	1297.64052	-22.6	6.7	-80.1	60.2	59.76431	0.896	-93.5	69.1	39.6	32.1	28.7	0.	0-1
2	-12.674	-25.258	1239.89818	-37.1	6.3	-80.8	52.9	58.92531	0.921	-90.2	63.2	47.5	22.9	14.2	187.40559	1-2
3	-8.906	-29.491	1192.70956	-27.3	3.2	-80.4	55.4	56.17162	0.994	-85.6	58.6	53.1	9.9	5.2	169.94173	2-3
4	-8.706	-25.661	1210.93835	-56.8	5.1	-81.1	45.8	57.27775	0.964	-85.2	62.4	47.7	16.3	14.4	114.80364	3-4
5	-8.493	-21.581	1249.78859	-68.5	6.8	-81.5	37.9	58.81645	0.916	-84.8	66.4	42.3	24.8	23.9	122.36394	4-5
6	-12.568	-20.980	1281.57433	-51.5	8.8	-81.9	45.1	60.61756	0.871	-90.3	67.3	42.0	29.8	24.0	124.70842	5-6
7	-17.041	-20.144	1339.63095	-39.8	11.5	-82.9	51.2	63.09089	0.804	-95.8	68.7	42.3	37.1	22.8	137.69724	6-7
8	-17.012	-24.723	1293.00647	-26.7	8.0	-80.9	58.8	61.15896	0.857	-95.3	64.4	47.7	31.4	12.6	132.60764	7-8
9	-17.051	-28.967	1270.80806	-9.6	4.5	-79.0	67.2	59.80479	0.889	-94.9	60.4	53.1	28.2	2.8	122.92348	8-9
10	-12.802	-29.256	1220.29730	-14.3	3.7	-79.5	62.0	57.71998	0.951	-90.2	59.4	52.9	18.7	4.7	128.96477	9-10
11	-8.906	-29.491	1192.70956	-27.3	3.2	-80.4	55.4	56.17162	0.994	-85.6	58.6	53.1	9.9	5.2	118.21407	10-11
12	-5.927	-33.260	1184.29404	77.2	1.5	-81.1	59.7	52.83479	0.970	-82.2	54.6	58.7	4.4	-4.1	144.75070	11-12
13	-5.698	-29.664	1184.48283	-77.8	2.9	-81.4	48.6	54.23477	0.983	-81.6	58.1	53.5	4.6	4.6	108.57093	12-13
14	-5.441	-25.935	1202.22943	-85.8	4.2	-81.5	38.1	56.20952	0.987	-80.9	61.8	48.2	13.6	13.6	112.70015	13-14
15	-5.147	-21.970	1239.78416	-87.5	5.3	-81.4	30.5	57.65996	0.940	-80.0	65.7	43.0	22.9	22.7	119.90031	14-15
16	-4.801	-17.625	1300.94116	-88.2	6.4	-81.1	24.4	59.64196	0.872	-79.0	70.0	37.8	32.5	32.2	131.51891	15-16
17	-8.261	-17.092	1313.37985	-74.3	8.4	-81.9	31.4	60.93092	0.847	-84.2	70.8	37.0	34.1	33.7	106.00908	16-17
18	-12.486	-16.233	1350.18076	-60.3	11.3	-83.2	38.4	62.97159	0.799	-90.3	71.9	36.7	38.3	34.3	130.52448	17-18
19	-17.162	-14.988	1417.00191	-49.4	15.0	-85.2	44.5	65.83708	0.726	-96.4	73.6	37.1	44.7	33.6	146.24855	18-19
20	-22.632	-13.065	1526.34605	-41.1	20.6	-88.6	49.9	70.02237	0.620	-102.3	76.0	38.1	53.2	31.9	174.47267	19-20
21	-22.186	-18.421	1432.76965	-32.0	15.5	-84.7	56.4	66.57496	0.709	-101.2	70.6	43.2	46.1	20.1	164.52546	20-21
22	-21.953	-23.974	1377.37975	-20.6	10.6	-81.7	63.6	64.24431	0.768	-100.2	66.0	48.4	41.1	9.3	141.99439	21-22
23	-21.867	-28.590	1350.54922	-7.2	5.6	-79.0	71.3	62.65508	0.802	-97.4	61.8	57.9	38.3	0.8	129.73247	22-23
24	-21.896	-32.982	1347.65143	6.9	0.5	-76.4	80.0	61.63159	0.816	-98.7	57.8	58.9	38.0	-10.5	123.44368	23-24
25	-17.147	-33.032	1269.68198	9.2	0.8	-77.0	76.6	58.90802	0.902	-94.5	56.6	58.4	28.1	-6.7	143.85600	24-25
26	-12.950	-33.100	1220.03716	13.7	1.1	-78.2	72.5	56.90832	0.964	-90.2	55.7	58.2	18.6	-4.6	127.13785	25-26
27	-9.098	-33.180	1192.69785	26.3	1.3	-79.7	65.0	55.02181	0.993	-85.9	55.0	58.4	9.9	-3.8	116.68150	26-27
28	-5.927	-33.260	1184.29404	77.2	1.5	-81.1	59.7	52.83479	0.970	-82.2	54.6	58.7	4.4	-4.1	96.08566	27-28

JULY 31, 1964 13 HR 16 MIN 48 SEC 712 MS

TAB NO 94

ATLAS PHOTO NO 94

POD SEQUENCE NO 194

TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA					540.088		1171.82620	-5.455	-31.466	2907.281	2.136	-71.549	116.475			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.334	-19.100	1286.37848	-22.8	6.7	-80.2	60.1	59.25307	0.896	-93.5	69.0	39.6	32.0	28.7	0.	0-1
2	-12.660	-25.207	1229.34456	-37.2	6.3	-80.8	52.8	58.42376	0.921	-90.2	63.3	47.5	23.0	14.3	185.33686	1-2
3	-8.924	-29.405	1182.40742	-27.7	3.2	-80.4	55.2	55.68646	0.994	-85.6	58.7	53.1	9.9	5.3	168.52600	2-3
4	-8.726	-25.606	1200.62198	-56.8	5.1	-81.1	45.7	56.78972	0.964	-85.2	62.4	47.7	16.3	14.5	113.84111	3-4
5	-8.515	-21.560	1239.22702	-68.5	6.8	-81.5	37.9	58.31930	0.916	-84.8	66.4	42.3	24.8	23.9	121.35210	4-5
6	-12.555	-20.964	1270.75189	-51.5	8.8	-81.9	45.1	60.10570	0.871	-90.3	67.4	42.0	29.8	24.1	123.65639	5-6
7	-16.989	-20.136	1328.22034	-39.9	11.5	-82.9	51.1	62.55353	0.805	-95.8	68.7	42.3	37.1	22.8	136.48844	6-7
8	-16.960	-24.676	1281.91933	-26.8	8.0	-80.9	58.6	60.63447	0.857	-95.3	64.4	47.7	31.4	12.7	131.50022	7-8
9	-16.997	-28.883	1259.75482	-9.8	4.5	-79.1	67.0	59.28453	0.889	-94.9	60.5	53.1	28.2	2.9	121.89006	8-9
10	-12.786	-29.171	1209.76198	-14.6	3.8	-79.6	61.8	57.22168	0.951	-90.2	59.5	52.9	18.7	4.8	127.81538	9-10
11	-8.924	-29.405	1182.40742	-27.7	3.2	-80.4	55.2	55.68646	0.994	-85.6	58.7	53.1	9.9	5.3	117.19400	10-11
12	-5.971	-33.141	1173.82066	76.3	1.5	-81.1	59.3	52.36048	0.970	-82.2	54.7	58.7	4.3	-4.0	143.49926	11-12
13	-5.744	-29.577	1174.19659	-77.4	2.9	-81.4	48.5	53.77084	0.983	-81.6	58.2	53.5	4.7	4.7	107.61961	12-13
14	-5.489	-25.879	1191.92662	-85.6	4.2	-81.5	38.1	55.72761	0.987	-80.9	61.9	48.2	13.7	13.6	111.74916	13-14
15	-5.197	-21.947	1229.24161	-87.4	5.3	-81.4	30.6	57.16932	0.940	-80.0	65.8	43.0	22.9	22.8	118.90172	14-15
16	-4.854	-17.639	1289.88403	-88.1	6.4	-81.1	24.5	59.13466	0.872	-79.0	70.0	37.8	32.5	32.2	130.40276	15-16
17	-8.284	-17.108	1302.28668	-74.2	8.4	-81.9	31.4	60.41619	0.847	-84.2	70.8	37.0	34.1	33.7	105.11875	16-17
18	-12.474	-16.258	1338.77080	-60.3	11.3	-83.2	38.4	62.43957	0.799	-90.3	71.9	36.7	38.3	34.2	129.41950	17-18
19	-17.109	-15.027	1404.81906	-49.4	15.0	-85.2	44.5	65.27406	0.727	-96.4	73.6	37.1	44.7	33.6	144.93815	18-19
20	-22.525	-13.133	1512.83627	-41.2	20.5	-88.6	49.8	69.40266	0.622	-102.3	76.0	38.1	53.1	31.9	172.67871	19-20
21	-22.085	-18.929	1420.26653	-32.1	15.5	-84.7	56.3	65.99386	0.710	-101.2	70.6	43.2	46.0	20.1	162.97230	20-21
22	-21.854	-23.935	1365.32487	-20.7	10.5	-81.8	63.5	63.68177	0.769	-100.2	66.0	48.4	41.0	9.4	140.76679	21-22
23	-21.767	-28.508	1338.56940	-7.4	5.6	-79.1	71.3	62.09898	0.803	-99.4	61.8	53.7	38.2	-0.7	128.62234	22-23
24	-21.793	-32.858	1335.43257	6.8	0.6	-76.5	79.7	61.07252	0.817	-98.7	57.9	58.9	37.9	-10.3	122.34262	23-24
25	-17.091	-32.911	1258.40675	9.0	0.9	-77.1	76.3	58.38483	0.903	-94.5	56.7	58.4	28.0	-6.5	142.43219	24-25
26	-12.932	-32.981	1209.29391	13.4	1.1	-78.2	72.1	56.40730	0.965	-90.2	55.8	58.2	18.6	-4.5	125.97677	25-26
27	-9.115	-33.062	1182.19952	25.6	1.4	-79.7	64.6	54.53165	0.993	-85.9	55.1	58.4	9.8	-3.7	115.65290	26-27
28	-5.971	-33.141	1173.82066	76.3	1.5	-81.1	59.3	52.36048	0.970	-82.2	54.7	58.7	4.3	-4.0	95.24199	27-28

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JULY 31, 1964 13 HR 16 MIN 53 SEC 832 MS TAB NO 95 ATLAS PHOTO NO 95 POD SEQUENCE NO 196

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				534.968		1161.44800		-5.486		-31.405		2896.903		2.139		-71.505		116.467	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.325	-19.119	1275.10233	-23.0	6.6	-80.2	59.9	58.74114	0.896	-93.5	69.0	39.6	32.0	28.7	0.	0-1			
2	-12.646	-25.155	1218.77594	-37.3	6.3	-80.8	52.7	57.92149	0.921	-90.2	63.3	47.5	23.0	14.3	183.27217	1-2			
3	-8.942	-29.318	1172.09380	-28.1	3.3	-80.5	55.0	55.20076	0.994	-85.6	58.8	53.1	10.0	5.3	167.10787	2-3			
4	-8.745	-25.552	1190.29117	-56.9	5.1	-81.1	45.6	56.30101	0.964	-85.2	62.5	47.7	16.4	14.5	112.87709	3-4			
5	-8.536	-21.539	1228.64867	-68.4	6.8	-81.5	37.9	57.82136	0.916	-84.8	66.4	42.3	24.8	23.9	120.33827	4-5			
6	-12.542	-20.948	1259.91194	-51.6	8.8	-82.0	45.0	59.59300	0.871	-90.3	67.4	42.0	29.9	24.1	122.60274	5-6			
7	-16.938	-20.129	1316.79276	-40.0	11.5	-82.9	51.0	62.01537	0.805	-95.8	68.7	42.3	37.1	22.9	135.27842	6-7			
8	-16.908	-24.629	1270.81776	-26.9	8.0	-81.0	58.4	60.10930	0.858	-95.3	64.4	47.7	31.4	12.8	130.39055	7-8			
9	-16.943	-28.799	1248.69055	-10.0	4.5	-79.2	66.7	58.76374	0.890	-94.9	60.5	53.1	28.2	3.0	120.85506	8-9			
10	-12.771	-29.088	1199.21477	-14.9	3.8	-79.6	61.5	56.72282	0.951	-90.2	59.5	52.9	18.7	4.9	126.66523	9-10			
11	-8.942	-29.318	1172.09380	-28.1	3.3	-80.5	55.0	55.20076	0.994	-85.6	58.8	53.1	10.0	5.3	116.17287	10-11			
12	-6.015	-33.023	1163.34033	75.3	1.6	-81.1	59.0	51.88624	0.970	-82.2	54.8	58.7	4.2	-3.9	142.24681	11-12			
13	-5.790	-29.490	1163.89984	-77.1	2.9	-81.4	48.4	53.30646	0.983	-81.6	58.3	53.5	4.8	4.8	106.66783	12-13			
14	-5.536	-25.823	1181.61052	-85.4	4.2	-81.5	38.1	55.24508	0.987	-80.9	61.9	48.2	13.7	13.7	110.79677	13-14			
15	-5.247	-21.924	1218.68344	-87.2	5.4	-81.4	30.7	56.67798	0.940	-80.0	65.8	43.0	23.0	22.8	117.90121	14-15			
16	-4.907	-17.652	1278.80977	-88.0	6.4	-81.1	24.6	58.62659	0.872	-79.0	70.0	37.8	32.5	32.1	129.28458	15-16			
17	-8.308	-17.125	1291.17490	-74.2	8.5	-81.9	31.5	59.90060	0.847	-84.2	70.7	37.0	34.1	33.6	104.22696	16-17			
18	-12.462	-16.282	1327.34160	-60.4	11.3	-83.2	38.4	61.90666	0.800	-90.3	71.9	36.7	38.2	34.2	128.31261	17-18			
19	-17.056	-15.066	1392.73822	-49.5	14.9	-85.2	44.5	64.71019	0.728	-96.4	73.5	37.1	44.6	33.5	143.62695	18-19			
20	-22.418	-13.200	1499.31219	-41.2	20.3	-88.6	49.8	68.78247	0.624	-102.3	75.9	38.1	53.0	31.8	170.88922	19-20			
21	-21.984	-18.938	1407.75056	-32.1	15.4	-84.7	56.2	65.44217	0.711	-101.2	70.6	43.2	45.9	20.1	161.41992	20-21			
22	-21.755	-23.896	1353.25899	-20.8	10.5	-81.8	63.3	63.11872	0.769	-100.2	66.0	48.4	40.9	9.5	139.53745	21-22			
23	-21.666	-28.426	1326.58231	-7.5	5.6	-79.2	71.0	61.54256	0.804	-99.4	61.9	53.7	38.2	-0.5	127.51081	22-23			
24	-21.690	-32.734	1323.21240	6.6	0.6	-76.6	79.4	60.51340	0.819	-98.7	58.0	58.9	37.8	-10.2	121.24161	23-24			
25	-17.034	-32.791	1247.12518	8.8	0.9	-77.2	76.0	57.86135	0.903	-94.5	56.8	58.4	27.9	-6.4	141.01102	24-25			
26	-12.914	-32.862	1198.54283	13.0	1.2	-78.3	71.7	55.90590	0.965	-90.2	55.9	58.2	18.6	-4.3	124.81579	25-26			
27	-9.131	-32.944	1171.69341	25.0	1.4	-79.7	64.2	54.04147	0.993	-85.9	55.3	58.4	9.8	-3.6	114.62348	26-27			
28	-6.015	-33.023	1163.34033	75.3	1.6	-81.1	59.0	51.88624	0.970	-82.2	54.8	58.7	4.2	-3.9	94.39779	27-28			

JULY 31, 1964 13 HR 16 MIN 58 SEC 951 MS TAB NO 96 ATLAS PHOTO NO 96 POD SEQUENCE NO 198

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				529.848		1151.05914		-5.517		-31.343		2886.514		2.141		-71.460		116.458	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.315	-19.138	1263.81276	-23.1	6.6	-80.3	59.7	58.22855	0.896	-93.5	69.0	39.6	31.9	28.6	0.	0-1			
2	-12.632	-25.104	1208.19272	-37.5	6.3	-80.8	52.5	57.41853	0.921	-90.2	63.4	47.5	23.0	14.4	181.21256	1-2			
3	-8.960	-29.232	1161.76920	-28.4	3.3	-80.5	54.8	54.71453	0.994	-85.6	58.9	53.1	10.1	5.4	165.68707	2-3			
4	-8.765	-25.498	1179.94635	-56.9	5.1	-81.1	45.6	55.81164	0.963	-85.2	62.5	47.7	16.4	14.6	111.91162	3-4			
5	-8.558	-21.519	1218.05373	-68.4	6.8	-81.5	37.9	57.32265	0.916	-84.8	66.4	42.3	24.8	24.0	119.32217	4-5			
6	-12.529	-20.932	1249.05469	-51.6	8.8	-82.0	45.0	59.07949	0.871	-90.3	67.4	42.0	29.9	24.1	121.54717	5-6			
7	-16.886	-20.122	1305.34845	-40.1	11.5	-82.9	51.0	61.47642	0.805	-95.8	68.7	42.3	37.0	22.9	134.06726	6-7			
8	-16.855	-24.582	1259.70221	-27.0	8.0	-81.0	58.3	59.58347	0.858	-95.3	64.5	47.7	31.4	12.8	129.27863	7-8			
9	-16.890	-28.716	1237.61594	-10.2	4.5	-79.2	66.5	58.24247	0.890	-94.9	60.6	53.1	28.1	3.1	119.81846	8-9			
10	-12.755	-29.001	1188.65625	-15.1	3.8	-79.7	61.3	56.22342	0.951	-90.2	59.6	52.9	18.7	5.0	125.51460	9-10			
11	-8.960	-29.232	1161.76920	-28.4	3.3	-80.5	54.8	54.71453	0.994	-85.6	58.9	53.1	10.1	5.4	115.15047	10-11			
12	-6.059	-32.905	1152.85371	74.2	1.6	-81.1	58.7	51.41211	0.970	-82.2	55.0	58.7	4.1	-3.8	140.99350	11-12			
13	-5.835	-29.403	1153.59311	-76.7	2.9	-81.3	48.3	52.84163	0.984	-81.6	58.4	53.5	4.9	4.9	105.71562	12-13			
14	-5.584	-25.767	1171.28149	-85.2	4.2	-81.5	38.1	54.76195	0.987	-80.9	62.0	48.2	13.8	13.8	109.84306	13-14			
15	-5.297	-21.901	1208.10999	-87.1	5.4	-81.4	30.7	56.18589	0.939	-80.0	65.8	43.0	23.0	22.8	116.89872	14-15			
16	-4.960	-17.666	1267.71846	-87.9	6.5	-81.1	24.7	58.11775	0.872	-79.0	70.0	37.8	32.5	32.1	128.16433	15-16			
17	-8.332	-17.143	1280.04465	-74.1	8.5	-81.8	31.5	59.38415	0.847	-84.2	70.7	37.0	34.0	33.6	103.33351	16-17			
18	-12.450	-16.307	1315.89326	-60.4	11.2	-83.2	38.4	61.37284	0.800	-90.3	71.9	36.7	38.2	34.2	127.20411	17-18			
19	-17.003	-15.105	1380.57948	-49.5	14.9	-85.2	44.4	64.14549	0.728	-96.4	73.5	37.1	44.6	33.5	142.31474	18-19			
20	-22.311	-13.268	1485.77985	-41.3	20.2	-88.5	49.7	68.16181	0.625	-102.3	75.8	38.1	52.9	31.7	169.10424	19-20			
21	-21.883	-18.946	1395.22205	-32.2	15.3	-84.8	56.1	64.82990	0.712	-101.2	70.5	43.2	45.8	20.1	159.86816	20-21			
22	-21.656	-23.857	1341.18254	-20.9	10.5	-81.9	63.1	62.55518	0.770	-100.2	66.0	48.4	40.8	9.6	138.30637	21-22			
23	-21.566	-28.345	1314.58871	-7.7	5.6	-79.3	70.8	60.98584	0.805	-99.4	61.9	53.7	38.1	-0.4	126.39786	22-23			
24	-21.587	-32.610	1310.99167	6.4	0.7	-76.8	79.1	59.95425	0.820	-98.7	58.1	58.9	37.7	-10.0	120.14067	23-24			
25	-16.978	-32.670	1235.83806	8.5	1.0	-77.3	75.6	57.33762	0.904	-94.5	56.9	58.4	27.8	-6.3	139.59268	24-25			
26	-12.896	-32.743	1187.78456	12.7	1.2	-78.4	71.4	55.40417	0.965	-90.2	56.0	58.2	18.5	-4.2	123.65482	25-26			
27	-9.147	-32.825	1161.18013	24.3	1.4	-79.7	63.9	53.55132	0.993	-85.9	55.4	58.4	9.8	-3.5	113.59354	26-27			
28	-6.059	-32.905	1152.85371	74.2	1.6	-81.1	58.7	51.41211	0.970	-82.2	55.0	58.7	4.1	-3.8	93.55287	27-28			

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JULY 31, 1964 13 HR 17 MIN 4 SEC 71 MS

TAB NO 97

ATLAS PHOTO NO 97

POD SEQUENCE NO 200

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				524.728	1140.65894	-5.547	-31.280	2876.114	2.144	-71.415	116.450					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.306	-19.157	1252.50908	-23.3	6.6	-80.3	59.5	57.71456	0.896	-93.5	69.0	39.6	31.9	28.6	0.	0-1
2	-12.618	-25.055	1197.57443	-37.6	6.3	-80.9	52.4	56.91391	0.920	-90.2	63.4	47.5	23.0	14.4	179.23584	1-2
3	-8.978	-29.149	1151.42661	-28.8	3.3	-80.5	54.6	54.22745	0.993	-85.6	59.0	53.1	10.1	5.5	164.25837	2-3
4	-8.785	-25.447	1169.56833	-56.9	5.1	-81.1	45.5	55.32070	0.963	-85.2	62.6	47.7	16.5	14.6	110.94142	3-4
5	-8.580	-21.501	1207.40854	-68.4	6.8	-81.5	37.9	56.82159	0.916	-84.8	66.4	42.3	24.9	24.0	118.29705	4-5
6	-12.516	-20.920	1238.14400	-51.6	8.8	-82.0	44.9	58.56344	0.871	-90.3	67.4	42.0	29.9	24.1	120.48618	5-6
7	-16.833	-20.118	1293.84665	-40.1	11.4	-83.0	50.9	60.93476	0.806	-95.8	68.7	42.3	37.0	22.9	132.84954	6-7
8	-16.803	-24.538	1248.54987	-27.2	8.0	-81.1	58.1	59.05592	0.858	-95.3	64.5	47.7	31.3	12.9	128.15527	7-8
9	-16.846	-28.635	1226.52278	-10.4	4.5	-79.3	66.3	57.72035	0.890	-94.9	60.7	52.9	18.7	5.0	124.36257	8-9
10	-12.739	-28.918	1178.07899	-15.4	3.8	-79.7	61.1	55.72314	0.951	-90.2	59.7	53.1	28.1	3.2	118.77613	9-10
11	-8.978	-29.149	1151.42661	-28.8	3.3	-80.5	54.6	54.22745	0.993	-85.6	59.0	53.1	10.1	5.5	114.12531	10-11
12	-6.104	-32.789	1142.36491	73.1	1.6	-81.1	58.4	50.93859	0.970	-82.2	55.1	58.7	4.0	-3.7	139.73828	11-12
13	-5.881	-29.318	1143.26953	-76.4	2.9	-81.3	48.2	52.37557	0.984	-81.6	58.5	53.5	5.0	5.0	104.76272	12-13
14	-5.632	-25.714	1160.92087	-85.1	4.2	-81.4	38.2	54.27737	0.986	-80.9	62.0	48.2	13.8	13.8	108.88489	13-14
15	-5.347	-21.881	1197.48853	-87.0	5.4	-81.4	30.8	55.69165	0.939	-80.0	65.8	43.0	23.0	22.8	115.88762	14-15
16	-5.014	-17.683	1256.55913	-87.8	6.5	-81.0	24.9	57.60588	0.872	-79.0	70.0	37.8	32.4	32.1	127.03005	15-16
17	-8.356	-17.164	1268.84308	-74.1	8.5	-81.8	31.6	58.86444	0.847	-84.2	70.7	37.0	34.0	33.6	102.43418	16-17
18	-12.438	-16.336	1304.36833	-60.4	11.2	-83.2	38.4	60.83546	0.800	-90.3	71.8	36.7	38.2	34.2	126.08712	17-18
19	-16.949	-15.148	1368.33691	-49.5	14.8	-85.2	44.4	67.53688	0.729	-96.4	73.4	37.1	44.5	33.5	140.99275	18-19
20	-22.204	-13.340	1472.15485	-41.3	20.1	-88.5	49.7	63.53688	0.627	-102.3	75.7	38.1	52.7	31.7	167.30895	19-20
21	-21.781	-18.958	1382.63193	-32.3	15.2	-84.8	56.0	64.24478	0.714	-101.2	70.5	43.2	45.8	20.1	158.29320	20-21
22	-1.556	-23.821	1329.08866	-21.1	10.4	-81.9	63.0	61.98994	0.771	-100.2	66.0	48.4	40.8	9.6	137.06162	21-22
23	-21.466	-28.266	1302.57909	-7.8	5.6	-79.4	70.6	60.42843	0.806	-99.4	62.0	53.7	36.0	0.5	125.75717	22-23
24	-21.484	-32.490	1298.77660	6.3	0.8	-76.9	78.8	59.39545	0.821	-98.7	58.2	58.9	37.6	-9.8	119.03914	23-24
25	-16.922	-32.553	1224.55052	8.3	1.0	-77.4	75.3	56.81390	0.905	-94.5	57.0	58.4	27.8	-6.1	138.17805	24-25
26	-12.879	-32.627	1177.02376	12.4	1.2	-78.4	71.1	54.90232	0.965	-90.2	56.1	58.2	18.5	-4.1	122.49471	25-26
27	-9.163	-32.710	1150.66397	23.6	1.4	-79.7	63.6	53.06174	0.992	-85.9	55.5	58.4	9.7	-3.4	112.56342	26-27
28	-6.104	-32.789	1142.36491	73.1	1.6	-81.1	58.4	50.93859	0.970	-82.2	55.1	58.7	4.0	-3.7	92.70770	27-28

JULY 31, 1964 13 HR 17 MIN 9 SEC 191 MS

TAB NO 98

ATLAS PHOTO NO 98

POD SEQUENCE NO 202

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				519.608	1130.24765	-5.579	-31.217	2865.703	2.147	-71.370	116.442					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.297	-19.176	1241.19139	-23.5	6.6	-80.4	59.4	57.19990	0.896	-93.5	69.0	39.7	31.8	28.6	0.	0-1
2	-12.604	-25.007	1186.94183	-37.7	6.3	-80.9	52.3	56.40860	0.920	-90.2	63.5	47.5	23.0	14.5	177.26022	1-2
3	-8.996	-29.065	1141.07263	-29.1	3.3	-80.5	54.4	53.73984	0.993	-85.6	59.1	53.1	10.2	5.6	162.82722	2-3
4	-8.805	-25.395	1159.17648	-57.0	5.1	-81.1	45.4	54.82911	0.963	-85.2	62.6	47.7	16.5	14.7	109.96982	3-4
5	-8.602	-21.484	1196.74782	-68.3	6.8	-81.5	38.0	56.31979	0.915	-84.8	66.5	42.3	24.9	24.0	117.27007	4-5
6	-12.504	-20.907	1227.21712	-51.7	8.8	-82.0	44.9	58.04664	0.871	-90.3	67.4	42.0	29.9	24.1	119.42340	5-6
7	-16.781	-20.114	1282.32961	-40.2	11.4	-83.0	50.8	60.39238	0.806	-95.8	68.7	42.3	37.0	22.9	131.63107	6-7
8	-16.750	-24.495	1237.38388	-27.3	8.0	-81.1	58.0	58.52771	0.858	-95.3	64.5	47.7	31.3	12.9	127.03012	7-8
9	-16.782	-28.554	1215.41878	-10.6	4.5	-79.4	66.1	57.19772	0.891	-94.9	60.7	53.1	28.0	3.3	117.73230	8-9
10	-12.723	-28.836	1167.48999	-15.6	3.8	-79.8	60.9	55.22230	0.951	-90.2	59.8	52.9	18.7	5.1	123.20979	9-10
11	-8.996	-29.065	1141.07263	-29.1	3.3	-80.5	54.4	53.73984	0.993	-85.6	59.1	53.1	10.2	5.6	113.10098	10-11
12	-6.148	-32.673	1131.86882	72.0	1.6	-81.0	58.1	50.46508	0.970	-82.2	55.2	58.7	3.9	-3.6	138.48217	11-12
13	-5.927	-29.234	1132.93558	-76.1	2.9	-81.3	48.1	51.90905	0.984	-81.6	58.6	53.5	5.1	5.1	103.80931	12-13
14	-5.680	-25.661	1150.54758	-84.9	4.2	-81.4	38.2	53.79219	0.986	-80.9	62.1	48.2	13.9	13.9	107.92540	13-14
15	-5.397	-21.861	1186.85281	-86.9	5.4	-81.3	30.9	55.19674	0.939	-80.0	65.9	43.0	23.0	22.9	114.87489	14-15
16	-5.067	-17.701	1245.38484	-87.7	6.5	-81.0	25.0	57.09332	0.873	-79.0	70.0	37.8	32.4	32.1	125.89427	15-16
17	-8.380	-17.184	1257.62514	-74.1	8.5	-81.8	31.7	58.34396	0.848	-84.2	70.7	37.0	34.0	33.6	101.53350	16-17
18	-12.426	-16.365	1292.82663	-60.4	11.2	-83.2	38.4	60.29730	0.801	-90.3	71.8	36.7	38.1	34.1	124.96895	17-18
19	-16.896	-15.192	1356.07936	-49.6	14.8	-85.2	44.4	63.00756	0.730	-96.4	73.4	37.1	44.4	33.4	139.67042	18-19
20	-22.096	-13.412	1458.52350	-41.4	20.0	-88.5	49.6	66.91165	0.629	-102.3	75.7	38.1	52.6	31.6	165.51715	19-20
21	-21.680	-18.970	1370.03113	-32.4	15.2	-84.8	55.9	63.65917	0.715	-101.2	70.5	43.2	45.7	20.1	156.72024	20-21
22	-21.457	-23.786	1316.94479	-21.2	10.4	-82.0	62.8	61.42424	0.772	-100.2	66.0	48.4	40.7	9.7	135.81577	21-22
23	-21.366	-28.188	1290.56241	-8.0	5.6	-79.5	70.4	59.87071	0.807	-99.4	62.0	53.7	37.9	-0.2	124.15722	22-23
24	-21.381	-32.369	1286.55946	6.1	0.8	-77.0	78.5	58.83655	0.822	-98.7	58.3	58.9	37.4	-9.7	117.93753	23-24
25	-16.866	-32.435	1213.25615	8.1	1.1	-77.5	75.0	56.28986	0.905	-94.5	57.1	58.4	27.7	-6.0	121.33451	24-25
26	-12.861	-32.510	1166.25464	12.0	1.2	-78.5	70.7	54.40008	0.966	-90.2	56.3	58.2	18.4	-4.0	121.33451	25-26
27	-9.180	-32.594	1140.13959	23.0	1.4	-79.8	63.2	52.57207	0.992	-85.9	55.6	58.4	9.7	-3.3	111.53246	26-27
28	-6.148	-32.673	1131.86882	72.0	1.6	-81.0	58.1	50.46508	0.970	-82.2	55.2	58.7	3.9	-3.6	91.86201	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 17 MIN 14 SEC 311 MS

TAB NO 99 ATLAS PHOTO NO 99 POD SEQUENCE NO 204

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				514.488		1119.82468	-5.610	-31.154	2855.280	2.150	-71.324	116.433				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.288	-19.195	1229.85913	-23.6	6.6	-80.4	59.2	56.68463	0.896	-93.5	69.0	39.7	31.8	28.5	0.	0-1
2	-12.590	-24.958	1176.29572	-37.8	6.3	-80.9	52.2	55.90265	0.920	-90.2	63.5	47.5	23.0	14.5	175.28175	1-2
3	-9.014	-28.981	1130.70714	-29.5	3.3	-80.5	54.3	53.25169	0.993	-85.6	59.1	53.1	10.2	5.7	161.39410	2-3
4	-8.825	-25.344	1148.77141	-57.0	5.1	-81.1	45.4	54.33690	0.963	-85.2	62.7	47.7	16.6	14.7	108.99694	3-4
5	-8.624	-21.466	1186.07283	-68.3	6.8	-81.5	38.0	55.81734	0.915	-84.8	66.5	42.3	24.9	24.0	116.24162	4-5
6	-12.491	-20.895	1216.27592	-51.7	8.8	-82.0	44.8	57.52914	0.871	-90.3	67.4	42.0	29.9	24.1	118.35940	5-6
7	-16.729	-20.111	1270.79945	-40.3	11.4	-83.0	50.7	59.84938	0.807	-95.8	68.7	42.4	36.9	22.9	130.41204	6-7
8	-16.698	-24.451	1226.20552	-27.4	8.0	-81.2	57.9	57.99892	0.859	-95.3	64.6	47.7	31.3	12.0	125.90361	7-8
9	-16.728	-28.473	1204.30440	-10.8	4.6	-79.4	65.8	56.67460	0.891	-94.9	60.8	53.1	20.0	3.4	116.68723	8-9
10	-12.108	-28.753	1156.88937	-15.9	3.8	-79.8	60.7	54.72091	0.951	-90.2	59.8	52.9	18.7	5.2	122.05667	9-10
11	-9.014	-28.981	1130.70714	-29.5	3.3	-80.5	54.3	53.25169	0.993	-85.6	59.1	53.1	10.2	5.7	112.07461	10-11
12	-6.192	-32.557	1121.36450	70.8	1.6	-81.0	57.8	49.99150	0.970	-82.2	55.3	58.7	3.9	-3.4	137.22493	11-12
13	-5.973	-29.149	1122.59090	-75.8	2.9	-81.3	48.0	51.44208	0.984	-81.6	58.7	53.5	5.2	5.1	102.85528	12-13
14	-5.728	-25.608	1140.16187	-84.7	4.2	-81.4	38.2	53.30644	0.986	-80.9	62.2	48.2	13.9	13.9	106.96474	13-14
15	-5.448	-21.841	1176.20372	-86.7	5.4	-81.3	31.0	54.70122	0.939	-80.0	65.9	43.0	23.0	22.9	113.86074	14-15
16	-5.121	-17.718	1234.19739	-87.7	6.5	-81.0	25.1	56.58016	0.873	-79.0	70.0	37.8	32.4	32.1	124.75753	15-16
17	-8.404	-17.205	1246.39305	-74.0	8.5	-81.8	31.7	57.82283	0.848	-84.2	70.7	37.0	34.0	33.6	100.63175	16-17
18	-12.414	-16.394	1281.27087	-60.4	11.2	-83.1	38.4	59.75847	0.801	-90.3	71.8	36.7	38.1	34.1	123.84926	17-18
19	-16.842	-15.235	1343.81036	-49.6	14.7	-85.2	44.3	62.43771	0.731	-96.4	73.3	37.1	44.4	33.4	138.34825	18-19
20	-21.989	-13.483	1444.89085	-41.4	19.9	-88.4	49.6	66.28636	0.631	-102.3	75.6	38.1	52.5	31.5	163.73289	19-20
21	-21.578	-18.982	1357.42276	-32.5	15.1	-84.8	55.8	63.07320	0.716	-101.2	70.5	43.2	45.6	20.2	155.15072	20-21
22	-21.357	-23.750	1304.81276	-21.3	10.4	-82.0	62.7	60.85816	0.773	-100.2	66.1	48.4	40.6	9.8	134.56949	21-22
23	-21.266	-28.109	1278.53955	-8.1	5.6	-79.5	70.1	59.31270	0.808	-99.4	62.1	53.7	37.8	-0.1	123.03537	22-23
24	-21.278	-32.249	1274.34035	5.9	0.9	-77.1	78.2	58.27756	0.824	-98.7	58.3	58.9	37.3	-9.5	116.83567	23-24
25	-16.810	-32.317	1201.95471	7.9	1.1	-77.6	74.7	55.76549	0.906	-94.5	57.2	58.4	27.6	-5.9	135.35660	24-25
26	-12.843	-32.394	1155.47672	11.7	1.3	-78.5	70.4	53.89742	0.966	-90.2	56.4	58.2	18.4	-3.9	120.17452	25-26
27	-9.196	-32.478	1129.60631	22.3	1.4	-79.8	62.9	52.08227	0.992	-85.9	55.7	58.4	9.7	-3.1	110.50081	26-27
28	-6.192	-32.557	1121.36450	70.8	1.6	-81.0	57.8	49.99150	0.970	-82.2	55.3	58.7	3.9	-3.4	91.01550	27-28

JULY 31, 1964 13 HR 17 MIN 19 SEC 431 MS

TAB NO 100 ATLAS PHOTO NO 100 POD SEQUENCE NO 206

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LON		R		V		PTH		AZ	
				509.368			1109.39084		-5.642		-31.090		2844.846		2.153		-71.278		116.425	
PHOTO DATA																				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
1	-11.279	-19.214	1218.51320	-23.8	6.6	-80.5	59.0	56.16932	0.896	-93.5	68.9	39.7	31.7	28.5	0.	0-				
2	-12.576	-24.909	1165.64870	-37.9	6.3	-80.9	52.1	55.39666	0.920	-90.2	63.5	47.5	23.1	14.6	173.26945	1-2				
3	-9.033	-28.896	1120.33533	-29.8	3.3	-80.5	54.1	52.76324	0.993	-85.6	59.2	53.1	10.3	5.8	159.96208	2-3				
4	-8.845	-25.291	1138.36299	-57.0	5.1	-81.1	45.3	53.84452	0.962	-85.2	62.7	47.7	16.7	14.8	108.02423	3-4				
5	-8.646	-21.448	1175.39929	-68.3	6.8	-81.5	38.0	55.31493	0.915	-84.8	66.5	42.3	24.9	24.0	115.21463	4-5				
6	-12.478	-20.881	1205.33908	-51.8	8.8	-82.0	44.8	57.01187	0.871	-90.3	67.4	42.0	29.9	24.1	117.29651	5-6				
7	-16.677	-20.105	1259.28006	-40.3	11.3	-83.0	50.6	59.30688	0.807	-95.8	68.7	42.4	36.9	22.9	129.19623	6-7				
8	-16.646	-24.406	1215.03088	-27.5	8.0	-81.2	57.7	57.47031	0.859	-95.3	64.6	47.7	31.3	13.0	124.78025	7-8				
9	-16.675	-28.391	1193.18974	-11.0	4.6	-79.5	65.6	56.15146	0.891	-94.9	60.9	53.1	28.0	3.5	115.64320	8-9				
10	-12.692	-28.670	1146.28444	-16.1	3.8	-79.8	60.5	54.21932	0.951	-90.2	59.9	52.9	18.8	5.3	120.90496	9-10				
11	-9.033	-28.896	1120.33533	-29.8	3.3	-80.5	54.1	52.76324	0.993	-85.6	59.2	53.1	10.3	5.8	111.04807	10-11				
12	-6.237	-32.440	1110.85138	69.5	1.6	-81.0	57.5	49.51773	0.970	-82.2	55.4	58.7	3.8	-3.3	135.96741	11-12				
13	-6.019	-29.063	1112.23912	-75.5	3.0	-81.3	47.9	50.97502	0.984	-81.6	58.8	53.5	5.3	5.2	101.90082	12-13				
14	-5.776	-25.553	1129.77193	-84.5	4.3	-81.4	38.2	52.82048	0.986	-80.9	62.2	48.2	14.0	14.0	106.00416	13-14				
15	-5.498	-21.820	1165.55492	-86.6	5.5	-81.3	31.1	54.20569	0.939	-80.0	65.9	43.0	23.0	22.9	112.84786	14-15				
16	-5.174	-17.734	1223.01756	-87.6	6.5	-81.0	25.2	56.06731	0.873	-79.0	70.0	37.8	32.4	32.1	123.62455	15-16				
17	-8.428	-17.225	1235.17030	-74.0	8.5	-81.8	31.8	57.30211	0.848	-84.2	70.7	37.0	34.0	33.5	99.73079	16-17				
18	-12.402	-16.421	1269.72907	-60.4	11.2	-83.1	38.5	59.22028	0.801	-90.3	71.8	36.7	38.1	34.1	122.73197	17-18				
19	-16.789	-15.277	1331.56471	-49.6	14.7	-85.2	44.3	61.66894	0.732	-96.4	73.3	37.1	44.3	33.3	137.03215	18-19				
20	-21.882	-13.552	1431.30313	-41.5	19.7	-88.4	49.5	65.66313	0.632	-102.3	75.5	38.1	52.4	31.5	161.96494	19-20				
21	-21.477	-18.992	1344.83813	-32.5	15.0	-84.8	55.7	62.48833	0.717	-101.2	70.4	43.2	45.5	20.2	153.95590	20-21				
22	-21.258	-23.713	1292.69406	-21.4	10.3	-82.1	62.5	60.29268	0.774	-100.2	66.1	48.5	40.5	9.8	133.32887	21-22				
23	-21.166	-28.029	1266.52466	-8.3	5.7	-79.6	69.9	58.75503	0.809	-99.4	62.1	53.7	37.7	0.1	121.91576	22-23				
24	-21.176	-32.127	1262.12709	5.7	0.9	-77.2	77.9	57.71879	0.825	-98.7	58.4	58.9	37.2	-9.3	115.73543	23-24				
25	-16.754	-32.198	1190.65100	7.6	1.1	-77.7	74.3	55.24099	0.906	-94.5	57.3	58.4	27.6	-5.7	133.95204	24-25				
26	-12.826	-32.276	1144.69263	11.3	1.3	-78.6	70.0	53.39448	0.966	-90.2	56.5	58.2	18.4	-3.7	119.01563	25-26				
27	-9.213	-32.361	1119.06487	21.6	1.5	-79.8	62.6	51.59237	0.992	-85.9	55.8	58.4	9.7	-3.0	109.46888	26-27				
28	-6.237	-32.440	1110.85138	69.5	1.6	-81.0	57.5	49.51773	0.970	-82.2	55.4	58.7	3.8	-3.3	90.16840	27-28				

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JULY 31, 1964 13 HR 17 MIN 24 SEC 551 MS

TAB NO 101

ATLAS PHOTO NO 101

POD SEQUENCE NO 208

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				504.248	1098.94556	-5.673	-31.026	2834.401	2.156	-71.232	116.416					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.270	-19.233	1207.15297	-23.9	6.6	-80.5	58.8	55.65332	0.896	-93.5	68.9	39.7	31.7	28.4	0.	0-1
2	-12.562	-24.859	1154.98665	-38.0	6.3	-81.0	52.0	54.88995	0.920	-90.2	63.6	47.5	23.1	14.6	171.25921	1-2
3	-9.051	-28.811	1109.95160	-30.1	3.3	-80.5	53.9	52.27422	0.993	-85.6	59.3	53.1	10.3	5.8	158.52766	2-3
4	-8.865	-25.238	1127.94017	-57.1	5.1	-81.1	45.2	53.35147	0.962	-85.2	62.8	47.7	16.7	14.8	107.05004	3-4
5	-8.668	-21.429	1164.70944	-68.3	6.9	-81.5	38.0	54.81176	0.915	-84.8	66.5	42.3	24.9	24.0	114.18573	4-5
6	-12.465	-20.868	1194.38527	-51.8	8.8	-82.0	44.8	56.49378	0.871	-90.3	67.4	42.0	29.9	24.2	116.23190	5-6
7	-16.625	-20.100	1247.74431	-40.4	11.3	-83.0	50.6	58.76362	0.807	-95.8	68.7	42.4	36.9	22.9	127.97944	6-7
8	-15.594	-24.360	1203.84183	-27.7	8.0	-81.3	57.6	56.94102	0.859	-95.3	64.7	47.7	31.2	13.1	123.65489	7-8
9	-16.621	-28.308	1182.06357	-11.2	4.6	-79.5	65.4	55.62778	0.891	-94.9	60.9	53.1	27.9	3.6	114.59763	8-9
10	-12.677	-28.586	1135.66719	-16.4	3.9	-79.9	60.2	53.71714	0.951	-90.2	60.0	52.9	18.8	5.4	119.75257	9-10
11	-9.051	-28.811	1109.95160	-30.1	3.3	-80.5	53.9	52.27422	0.993	-85.6	59.3	53.1	10.3	5.8	110.02044	10-11
12	-6.281	-32.322	1100.33064	-68.1	1.6	-81.0	57.2	49.04394	0.969	-82.2	55.6	58.7	3.7	-3.2	134.70875	11-12
13	-6.066	-28.977	1101.87650	-75.2	3.0	-81.2	47.8	50.50747	0.984	-81.6	58.8	53.5	5.3	5.3	100.94577	12-13
14	-5.824	-25.499	1119.36874	-84.3	4.3	-81.3	38.2	52.33391	0.986	-80.9	62.3	48.3	14.1	14.0	105.04222	13-14
15	-5.549	-21.799	1154.89107	-86.5	5.5	-81.3	31.2	53.70946	0.939	-80.0	65.9	43.0	23.1	22.9	111.83326	14-15
16	-5.228	-17.750	1211.82179	-87.5	6.6	-81.0	25.4	55.55373	0.873	-79.0	69.9	37.8	32.3	32.1	122.48987	15-16
17	-8.452	-17.245	1223.93015	-73.9	8.5	-81.8	31.8	56.78059	0.848	-84.2	70.6	37.0	33.9	33.5	98.82848	16-17
18	-12.390	-16.449	1258.16916	-60.4	11.2	-83.1	38.5	58.68125	0.802	-90.3	71.7	36.7	38.0	34.0	121.61291	17-18
19	-16.735	-15.318	1319.30260	-49.7	14.6	-85.2	44.3	61.29940	0.733	-96.4	73.2	37.1	44.2	33.3	135.71535	18-19
20	-21.776	-13.621	1417.70691	-41.5	19.6	-88.4	49.4	65.03950	0.634	-102.3	75.4	38.1	52.3	31.4	160.20187	19-20
21	-21.377	-19.002	1332.24139	-32.6	14.9	-84.8	55.6	61.90290	0.718	-101.2	70.4	43.2	45.4	20.2	152.04254	20-21
22	-21.159	-23.676	1280.56430	-21.5	10.3	-82.1	62.3	59.72670	0.775	-100.2	66.1	48.5	40.5	9.9	132.08688	21-22
23	-21.067	-27.950	1254.50185	-8.4	5.7	-79.7	69.7	58.19700	0.810	-99.4	62.2	53.7	37.5	0.3	119.67192	22-23
24	-21.074	-32.006	1249.91101	5.6	1.0	-77.3	77.6	57.15990	0.826	-98.7	58.5	58.9	37.1	-9.2	114.63478	23-24
25	-16.699	-32.079	1179.33994	7.4	1.2	-77.8	74.0	54.71616	0.907	-94.5	57.4	58.4	27.5	-5.6	132.54967	24-25
26	-12.808	-32.159	1133.89983	11.0	1.3	-78.7	69.7	52.89112	0.966	-90.2	56.6	58.2	18.3	-3.6	117.85663	25-26
27	-9.229	-32.244	1108.51488	20.9	1.5	-79.8	62.2	51.10236	0.992	-85.9	56.0	58.4	9.6	-2.9	108.43622	26-27
28	-6.281	-32.322	1100.33064	68.1	1.6	-81.0	57.2	49.04394	0.969	-82.2	55.6	58.7	3.7	-3.2	89.32059	27-28

JULY 31, 1964 13 HR 17 MIN 29 SEC 671 MS

TAB NO 102

ATLAS PHOTO NO 102

POD SEQUENCE NO 210

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				499.129	1088.48871	-5.705	-30.961	2823.944	2.159	-71.185	116.408					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.261	-19.252	1195.77818	-24.1	6.6	-80.6	58.7	55.13657	0.896	-93.5	68.9	39.8	31.7	28.4	0.	0-1
2	-12.548	-24.809	1144.30731	-38.2	6.4	-81.0	51.8	54.38242	0.920	-90.2	63.6	47.5	23.1	14.7	169.26128	1-2
3	-9.070	-28.726	1099.55524	-30.5	3.3	-80.5	53.7	51.78461	0.993	-85.6	59.4	53.1	10.4	5.9	157.09010	2-3
4	-8.886	-25.186	1117.50052	-57.1	5.1	-81.1	45.2	52.85762	0.962	-85.2	62.9	47.7	16.8	14.9	106.07395	3-4
5	-8.690	-21.411	1153.99886	-68.2	6.9	-81.5	38.0	54.30762	0.915	-84.8	66.5	42.3	25.0	24.1	113.15392	4-5
6	-12.453	-20.855	1183.41017	-51.8	8.8	-82.0	44.7	55.97469	0.871	-90.3	67.5	42.0	29.9	24.2	115.16506	5-6
7	-16.573	-20.096	1236.18779	-40.5	11.3	-83.1	50.5	58.21938	0.808	-95.8	68.7	42.4	36.8	22.9	126.76108	6-7
8	-16.561	-24.316	1192.63622	-27.8	8.0	-81.3	57.4	56.41094	0.859	-95.3	64.7	47.7	31.2	13.1	122.52645	7-8
9	-16.568	-28.227	1170.92578	-11.3	4.6	-79.6	65.1	55.10355	0.892	-94.9	61.0	53.1	27.9	3.7	113.54998	8-9
10	-12.661	-28.502	1125.03714	-16.7	3.9	-79.9	60.0	53.21435	0.951	-90.2	60.1	52.9	18.8	5.5	118.59959	9-10
11	-9.070	-28.726	1099.55524	-30.5	3.3	-80.5	53.7	51.78461	0.993	-85.6	59.4	53.1	10.4	5.9	108.99165	10-11
12	-6.326	-32.205	1089.80270	-66.7	1.6	-81.0	56.9	48.57018	0.969	-82.2	55.7	58.7	3.6	-3.1	133.44890	11-12
13	-6.112	-28.892	1091.50201	-74.9	3.0	-81.2	47.7	50.03931	0.984	-81.6	58.9	53.5	5.4	5.4	99.99009	12-13
14	-5.873	-25.445	1108.94966	-84.1	4.3	-81.3	38.2	51.84660	0.985	-80.9	62.3	48.3	14.1	14.1	104.07846	13-14
15	-5.600	-21.778	1144.20764	-86.4	5.5	-81.2	31.3	53.21234	0.939	-80.0	66.0	43.0	23.1	23.0	110.81592	14-15
16	-5.282	-17.766	1200.60303	-87.4	6.6	-80.9	25.5	55.03912	0.873	-79.0	69.9	37.8	32.3	32.1	121.55192	15-16
17	-8.476	-17.265	1212.66573	-73.9	8.5	-81.8	31.9	56.25794	0.848	-84.2	70.6	37.0	33.9	33.5	97.92399	16-17
18	-12.378	-16.477	1246.58429	-60.4	11.1	-83.1	38.5	58.14105	0.802	-90.3	71.7	36.7	38.0	34.0	120.49149	17-18
19	-16.682	-15.360	1307.01654	-49.7	14.6	-85.2	44.2	60.72874	0.734	-96.4	73.2	37.1	44.2	33.2	134.39724	18-19
20	-21.669	-13.690	1404.09344	-41.6	19.5	-88.3	49.4	64.41508	0.636	-102.3	75.4	38.1	52.1	31.3	158.44190	19-20
21	-21.060	-23.639	1268.42151	-21.6	10.3	-82.2	62.2	59.16012	0.776	-100.2	66.1	48.5	40.4	10.0	130.84213	20-21
22	-20.967	-27.870	1242.47141	-8.6	5.7	-79.8	69.4	57.63864	0.811	-99.4	62.2	53.7	37.5	0.3	119.67192	22-23
23	-20.972	-31.885	1237.69450	5.4	1.1	-77.5	77.3	56.60100	0.827	-98.7	58.6	58.9	37.0	-9.0	113.53399	23-24
24	-16.643	-31.961	1168.02313	7.2	1.2	-77.9	73.7	54.19106	0.907	-94.5	57.5	58.4	27.4	-5.5	131.15031	24-25
25	-12.791	-32.061	1123.09943	10.6	1.4	-78.7	69.4	52.38740	0.966	-90.2	56.7	58.2	18.3	-3.5	116.69775	25-26
26	-9.246	-32.127	1097.95705	20.2	1.5	-79.8	61.9	50.61233	0.992	-85.9	56.1	58.4	9.6	-2.8	107.40283	26-27
28	-6.326	-32.205	1089.80270	66.7	1.6	-81.0	56.9	48.57018	0.969	-82.2	55.7	58.7	3.6	-3.1	88.47225	27-28

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JULY 31, 1964 13 HR 17 MIN 34 SEC 791 MS

TAB NO 103 ATLAS PHOTO NO 103 POD SEQUENCE NO 212

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
				494.009		1078.02032	-5.738	-30.895	2813.476	2.162	-71.138	116.399				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.252	-19.271	1184.38899	-24.2	6.6	-80.6	58.5	54.61886	0.896	-93.5	68.9	39.8	31.6	28.4	0.	0-1
2	-12.535	-24.762	1133.60306	-38.3	6.4	-81.0	51.7	53.87371	0.920	-90.2	63.7	47.5	23.1	14.7	167.31529	1-2
3	-9.089	-28.643	1089.14383	-30.8	3.4	-80.5	53.6	51.29429	0.992	-85.6	59.5	53.1	10.5	6.0	155.64728	2-3
4	-8.906	-25.135	1107.03552	-57.1	5.2	-81.1	45.1	52.36257	0.962	-85.2	62.9	47.7	16.8	14.9	105.09436	3-4
5	-8.713	-21.395	1143.25183	-68.2	6.9	-81.5	38.0	51.80178	0.915	-84.8	66.6	42.3	25.0	24.1	112.11584	4-5
6	-12.440	-20.843	1172.39830	-51.9	8.8	-82.0	44.7	55.45385	0.871	-90.3	67.5	42.1	29.9	24.2	114.09494	5-6
7	-15.521	-20.093	1224.59494	-40.5	11.2	-83.1	50.4	57.67342	0.808	-95.8	68.7	42.4	36.8	22.9	125.53975	6-7
8	-16.489	-24.273	1181.40712	-27.9	7.9	-81.3	57.3	55.87976	0.859	-95.3	64.7	47.7	31.2	13.2	121.39083	7-8
9	-16.515	-28.146	1159.77649	-11.5	4.6	-79.7	64.9	54.57880	0.892	-94.9	61.1	53.1	27.9	3.8	112.49454	8-9
10	-12.646	-28.420	1114.39313	-16.9	3.9	-80.0	59.8	52.71091	0.951	-90.2	60.2	52.9	18.8	5.6	117.44638	9-10
11	-9.089	-28.643	1089.14383	-30.8	3.4	-80.5	53.6	51.29429	0.992	-85.6	59.5	53.1	10.5	6.0	107.96177	10-11
12	-6.371	-32.090	1079.26981	65.2	1.6	-81.0	56.6	48.09671	0.969	-82.2	55.8	58.7	3.5	-3.0	132.18751	11-12
13	-6.159	-28.808	1081.11235	-74.6	3.0	-81.2	47.6	49.57015	0.985	-81.6	59.0	53.5	5.5	5.5	99.03357	12-13
14	-5.921	-25.393	1098.50534	-83.9	4.3	-81.3	38.3	51.35813	0.985	-80.9	62.4	48.3	14.2	14.1	103.11133	13-14
15	-5.651	-21.760	1133.48824	-86.2	5.5	-81.2	31.4	52.71357	0.939	-80.0	66.0	43.0	23.1	23.0	109.79250	14-15
16	-5.336	-17.785	1189.33572	-87.3	6.6	-80.9	25.6	54.52233	0.874	-79.0	69.9	37.8	32.3	32.0	120.20472	15-16
17	-8.501	-17.287	1201.35172	-73.8	8.5	-81.8	32.0	55.73301	0.849	-84.2	70.6	37.0	33.9	33.5	97.01570	16-17
18	-12.366	-16.507	1234.94873	-60.4	11.1	-83.1	38.5	57.59849	0.802	-90.3	71.7	36.7	38.0	34.0	119.36521	17-18
19	-16.628	-15.405	1294.67008	-49.7	14.5	-85.1	44.2	60.15567	0.734	-96.4	73.2	37.1	44.1	33.2	133.07446	18-19
20	-21.563	-13.761	1390.44134	-41.6	19.4	-88.3	49.3	63.78841	0.638	-102.3	75.3	38.1	52.0	31.2	156.88067	19-20
21	-21.175	-19.025	1306.98094	-32.8	14.8	-84.9	55.4	57.02895	0.720	-101.2	70.4	43.2	45.2	20.2	148.92167	20-21
22	-20.961	-23.604	1256.25929	-21.7	10.3	-82.2	62.0	58.59265	0.777	-100.2	66.1	48.5	40.3	10.0	129.58969	21-22
23	-20.868	-27.793	1230.43524	-8.7	5.7	-79.9	69.2	57.08004	0.812	-99.4	62.3	53.7	37.5	0.4	118.54508	22-23
24	-20.871	-31.765	1225.48711	5.2	1.1	-77.6	77.0	56.04256	0.829	-98.7	58.7	58.9	36.9	-8.9	112.43318	23-24
25	-16.588	-31.844	1156.70744	6.9	1.2	-78.0	73.4	53.66602	0.908	-94.5	57.6	58.4	27.4	-5.3	129.75572	24-25
26	-12.774	-31.926	1112.29626	10.3	1.4	-78.8	69.0	51.88356	0.967	-90.2	56.8	58.2	18.2	-3.4	115.54048	25-26
27	-9.263	-32.012	1087.39471	19.6	1.5	-79.9	61.6	50.12267	0.992	-85.9	56.2	58.4	9.6	-2.7	106.36962	26-27
28	-6.371	-32.090	1079.26981	65.2	1.6	-81.0	56.6	48.09671	0.969	-82.2	55.8	58.7	3.5	-3.0	87.62348	27-28

JULY 31, 1964 13 HR 17 MIN 39 SEC 911 MS

TAB NO 104 ATLAS PHOTO NO 104 POD SEQUENCE NO 214

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				488.889		1067.54047	-5.770	-30.830	2802.996	2.165	-71.091	116.390				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.243	-19.290	1172.98537	-24.4	6.6	-80.7	58.3	54.10044	0.896	-93.5	68.9	39.8	31.6	28.3	0.	0-1
2	-12.521	-24.714	1122.88362	-38.4	6.4	-81.0	51.6	53.36428	0.920	-90.2	63.7	47.5	23.1	14.8	165.37048	1-2
3	-9.107	-28.560	1078.72028	-31.1	3.4	-80.5	53.4	50.80340	0.992	-85.6	59.6	53.1	10.5	6.1	154.20199	2-3
4	-8.927	-25.085	1096.55603	-57.1	5.2	-81.1	45.1	51.86685	0.961	-85.2	63.0	47.7	16.9	15.0	104.11329	3-4
5	-8.735	-21.378	1132.48865	-68.1	6.9	-81.5	38.1	53.29518	0.915	-84.8	66.6	42.3	25.0	24.1	111.07589	4-5
6	-12.428	-20.832	1161.36955	-51.9	8.8	-82.1	44.6	54.93222	0.871	-90.3	67.5	42.1	29.9	24.2	113.02312	5-6
7	-16.469	-20.090	1212.98590	-40.6	11.2	-83.1	50.3	57.12670	0.809	-95.8	68.7	42.4	36.7	22.9	124.31737	6-7
8	-16.437	-24.230	1170.16336	-28.0	7.9	-81.4	57.1	55.34788	0.860	-95.3	64.8	47.7	31.2	13.2	120.25333	7-8
9	-16.461	-28.066	1148.61530	-11.7	4.6	-79.7	64.7	54.05348	0.892	-94.9	61.1	53.1	27.8	3.9	111.44555	8-9
10	-12.631	-28.339	1103.73640	-17.1	3.9	-80.0	59.6	52.20686	0.951	-90.2	60.2	52.9	18.8	5.6	116.29269	9-10
11	-9.107	-28.560	1078.72028	-31.1	3.4	-80.5	53.4	50.80340	0.992	-85.6	59.6	53.1	10.5	6.1	106.93050	10-11
12	-6.417	-31.974	1068.72887	63.7	1.6	-80.9	56.4	47.62316	0.969	-82.2	55.9	58.7	3.4	-2.9	130.92494	11-12
13	-6.206	-28.724	1070.71161	-74.3	3.0	-81.2	47.5	49.10047	0.985	-81.6	59.1	53.5	5.6	5.6	98.07639	12-13
14	-5.970	-25.340	1088.04774	-83.8	4.3	-81.3	38.3	50.86904	0.985	-80.9	62.4	48.3	14.2	14.2	102.14280	13-14
15	-5.703	-21.741	1122.75397	-86.1	5.5	-81.2	31.5	52.21412	0.939	-80.0	66.0	43.0	23.1	23.0	108.76741	14-15
16	-5.391	-17.806	1178.05302	-87.2	6.6	-80.9	25.8	54.00484	0.874	-79.0	69.9	37.8	32.3	32.0	119.05605	15-16
17	-8.526	-17.310	1190.02087	-73.8	8.5	-81.8	32.1	55.20730	0.849	-84.2	70.6	37.0	33.9	33.4	96.10585	16-17
18	-12.355	-16.538	1223.29582	-60.4	11.1	-83.1	38.5	57.05511	0.803	-90.3	71.6	36.7	37.9	33.9	118.23728	17-18
19	-16.575	-15.450	1282.32588	-49.8	14.5	-85.1	44.2	59.58187	0.735	-96.4	73.1	37.1	44.0	33.1	131.75113	18-19
20	-21.456	-13.832	1376.76155	-41.7	19.3	-88.3	49.3	63.16139	0.639	-102.3	75.2	38.1	51.9	31.2	154.92420	19-20
21	-21.074	-19.037	1294.32213	-32.8	14.7	-84.9	55.3	60.14065	0.722	-101.2	70.3	43.2	45.1	20.2	147.35733	20-21
22	-20.863	-23.569	1244.08583	-21.8	10.2	-82.3	61.9	58.02467	0.778	-100.2	66.1	48.5	40.2	10.1	128.33605	21-22
23	-20.769	-27.715	1218.39063	-8.9	5.7	-79.9	69.0	56.52105	0.813	-99.4	62.3	53.7	37.4	0.5	117.41687	22-23
24	-20.770	-31.646	1213.27597	5.1	1.2	-77.7	76.7	55.48396	0.830	-98.7	58.7	58.9	36.8	-8.7	111.33203	23-24
25	-16.532	-31.727	1145.38370	6.7	1.3	-78.1	73.1	53.14061	0.909	-94.5	57.7	58.4	27.3	-5.2	128.36319	24-25
26	-12.757	-31.810	1101.48386	9.9	1.4	-78.8	68.7	51.37928	0.967	-90.2	56.9	58.2	18.2	-3.3	114.38299	25-26
27	-9.280	-31.896	1076.82332	18.9	1.5	-79.9	61.3	49.63283	0.992	-85.9	56.3	58.4	9.6	-2.6	105.33548	26-27
28	-6.417	-31.974	1068.72887	63.7	1.6	-80.9	56.4	47.62316	0.969	-82.2	55.9	58.7	3.4	-2.9	86.77409	27-28

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JULY 31, 1964 13 HR 17 MIN 45 SEC 31 MS

TAB NO 105

ATLAS PHOTO NO 105

POD SEQUENCE NO 216

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				483.769		1057.04880	-5.803	-30.763	2792.504	2.168	-71.043	116.382				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.234	-19.309	1161.56696	-24.5	6.6	-80.7	58.2	53.58135	0.896	-93.5	68.8	39.8	31.5	28.3	0.	0-1
2	-12.507	-24.666	1112.14986	-38.5	6.4	-81.1	51.5	52.85416	0.919	-90.2	63.8	47.5	23.1	14.8	163.42204	1-2
3	-9.126	-28.477	1068.28461	-31.4	3.4	-80.5	53.2	50.31194	0.992	-85.6	59.6	53.1	10.6	6.2	152.75447	2-3
4	-8.948	-25.034	1086.06277	-57.2	5.2	-81.1	45.0	51.37047	0.961	-85.2	63.0	47.7	16.9	15.0	103.13087	3-4
5	-8.758	-21.362	1121.71089	-68.1	6.9	-81.5	38.1	52.78789	0.914	-84.8	66.6	42.3	25.0	24.1	110.03443	4-5
6	-12.415	-20.821	1150.32562	-51.9	8.8	-82.1	44.6	54.40987	0.871	-90.3	67.5	42.1	29.8	24.2	111.94963	5-6
7	-16.416	-20.087	1201.36259	-40.7	11.2	-83.1	50.2	56.57931	0.809	-95.8	68.7	42.4	36.7	22.9	123.09418	6-7
8	-16.385	-24.187	1158.90594	-28.1	7.9	-81.4	57.0	54.81536	0.860	-95.3	64.8	47.8	31.1	13.3	119.11441	7-8
9	-16.408	-27.986	1137.44225	-11.9	4.6	-79.8	64.5	53.52761	0.893	-94.8	61.2	53.1	27.8	4.0	110.39113	8-9
10	-12.616	-28.256	1093.06711	-17.4	3.9	-80.0	59.4	51.70222	0.951	-90.2	60.3	52.9	18.8	5.7	115.13806	9-10
11	-9.126	-28.477	1068.28461	-31.4	3.4	-80.5	53.2	50.31194	0.992	-85.6	59.6	53.1	10.6	6.2	105.89809	10-11
12	-6.462	-31.859	1058.17929	-62.1	1.6	-80.9	56.1	47.14949	0.969	-82.2	56.0	58.8	3.4	-2.7	129.66115	11-12
13	-6.253	-28.639	1060.29990	-74.0	3.0	-81.2	47.5	48.63031	0.985	-81.6	59.2	53.6	5.7	5.6	97.11853	12-13
14	-6.019	-25.288	1077.57759	-83.6	4.3	-81.2	38.3	50.37936	0.985	-80.9	62.5	48.3	14.2	14.2	101.17307	13-14
15	-5.754	-21.722	1112.00642	-86.0	5.6	-81.2	31.6	51.71405	0.938	-80.0	66.0	43.0	23.1	23.0	107.74095	14-15
16	-5.445	-17.823	1166.75758	-87.1	6.7	-80.9	25.9	53.48676	0.874	-79.0	69.9	37.8	32.3	32.0	117.90660	15-16
17	-8.550	-17.333	1178.67584	-73.7	8.5	-81.8	32.1	54.68093	0.849	-84.2	70.6	37.0	33.9	33.4	95.19488	16-17
18	-12.343	-16.568	1211.62837	-60.4	11.1	-83.1	38.5	56.51105	0.803	-90.3	71.6	36.7	37.9	33.9	117.10796	17-18
19	-15.521	-15.494	1269.96028	-49.8	14.4	-85.1	44.2	59.00749	0.736	-96.4	73.1	37.1	43.9	33.1	130.42784	18-19
20	-21.349	-13.903	1363.08815	-41.7	19.2	-88.2	49.2	62.53419	0.641	-102.3	75.1	38.1	51.8	31.1	153.17318	19-20
21	-20.973	-19.049	1281.65372	-32.9	14.7	-84.9	55.2	59.55191	0.723	-101.2	70.3	43.2	45.0	20.2	145.79601	20-21
22	-20.764	-23.534	1231.90213	-21.9	10.2	-82.3	61.7	57.45621	0.778	-100.2	66.2	48.5	40.1	10.2	127.08179	21-22
23	-20.670	-27.637	1206.33759	-9.0	5.7	-80.0	68.8	55.96167	0.814	-99.4	62.4	53.7	37.3	0.6	114.78753	22-23
24	-20.668	-31.527	1201.06035	4.9	1.4	-77.8	76.4	54.92516	0.831	-98.7	58.8	58.9	36.7	-8.6	120.23054	23-24
25	-16.477	-31.610	1134.05118	6.5	1.3	-78.2	72.8	52.61480	0.909	-94.5	57.8	58.4	27.2	-5.1	126.97285	24-25
26	-12.740	-31.694	1090.66147	9.6	1.4	-78.9	68.4	50.87453	0.967	-90.2	57.1	58.3	18.2	-3.1	113.22511	25-26
27	-9.297	-31.781	1066.24226	18.2	1.5	-79.9	61.0	49.14277	0.992	-85.9	56.4	58.4	9.6	-2.5	104.30040	26-27
28	-6.462	-31.859	1058.17929	62.1	1.6	-80.9	56.1	47.14949	0.969	-82.2	56.0	58.8	3.4	-2.7	85.92378	27-28

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TAB NO 106

ATLAS PHOTO NO 106

POD SEQUENCE NO 218

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				478.649			1046.54547	-5.836	-30.696	2782.001	2.171	-70.995	116.373			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.225	-19.328	1150.13391	-24.7	6.5	-80.7	58.0	53.06168	0.896	-93.5	68.8	39.9	31.5	28.2	0.	0-1
2	-12.493	-24.618	1101.40440	-38.6	6.4	-81.1	51.4	52.34349	0.919	-90.2	63.8	47.5	23.2	14.9	161.46065	1-2
3	-9.145	-28.393	1057.83780	-31.7	3.4	-80.6	53.1	49.81995	0.992	-85.6	59.7	53.1	10.6	6.3	151.30555	2-3
4	-8.968	-24.983	1075.55826	-57.2	5.2	-81.1	45.0	50.87356	0.961	-85.2	63.1	47.7	17.0	15.1	102.14749	3-4
5	-8.780	-21.346	1110.92278	-68.1	6.9	-81.5	38.1	52.28012	0.914	-84.8	66.6	42.3	25.0	24.1	108.99237	4-5
6	-12.402	-20.809	1139.27110	-52.0	8.7	-82.1	44.6	53.88702	0.871	-90.3	67.5	42.1	29.8	24.2	110.87519	5-6
7	-16.364	-20.084	1189.73021	-40.7	11.2	-83.1	50.2	56.03149	0.809	-95.8	68.7	42.4	36.7	23.0	121.87085	6-7
8	-16.333	-24.143	1147.63776	-28.3	7.9	-81.5	56.8	54.28233	0.860	-95.3	64.8	47.8	31.1	13.3	117.97526	7-8
9	-16.355	-27.905	1126.25856	-12.1	4.7	-79.9	64.3	53.00124	0.893	-94.8	61.3	53.1	27.8	4.0	109.33587	8-9
10	-12.601	-28.174	1082.38628	-17.6	3.9	-80.1	59.2	51.19703	0.951	-90.2	60.4	52.9	18.8	5.8	113.98291	9-10
11	-9.145	-28.393	1057.83780	-31.7	3.4	-80.6	53.1	49.81995	0.992	-85.6	59.7	53.1	10.6	6.3	104.86465	10-11
12	-6.507	-31.742	1047.62074	-60.4	1.6	-80.9	55.8	46.67564	0.962	-82.2	56.2	58.8	3.3	-2.6	128.39631	11-12
13	-6.299	-28.554	1049.87816	-73.8	3.0	-81.1	47.4	48.15977	0.985	-81.6	59.3	53.6	5.8	5.7	96.16005	12-13
14	-6.068	-25.235	1067.09729	-83.4	4.3	-81.2	38.3	49.88921	0.984	-80.9	62.6	48.3	14.3	14.3	100.20249	13-14
15	-5.805	-21.703	1101.24968	-85.9	5.6	-81.1	31.7	51.21355	0.938	-80.0	66.0	43.0	23.1	23.0	106.71398	14-15
16	-5.500	-17.841	1155.45560	-87.0	6.7	-80.9	26.0	52.96838	0.874	-79.0	69.9	37.8	32.2	32.0	116.75772	15-16
17	-8.575	-17.355	1167.32324	-73.7	8.5	-81.7	32.2	54.15421	0.849	-84.2	70.5	37.0	33.8	33.4	94.28328	16-17
18	-12.331	-16.598	1199.95360	-60.4	11.1	-83.1	38.5	55.96664	0.804	-90.3	71.6	36.7	37.9	33.9	115.97802	17-18
19	-16.468	-15.538	1257.59041	-49.8	14.4	-85.1	44.1	58.43291	0.737	-96.4	73.0	37.1	43.9	33.1	129.10558	18-19
20	-21.243	-13.973	1349.42113	-41.8	19.1	-88.2	49.2	61.90729	0.643	-102.3	75.0	38.1	51.6	31.0	151.42922	19-20
21	-20.872	-19.061	1268.98193	-33.0	14.6	-84.9	55.1	58.96301	0.724	-101.2	70.3	43.2	44.9	20.2	144.24048	20-21
22	-20.665	-23.498	1219.71175	-22.1	10.2	-82.4	61.5	56.88744	0.779	-100.2	66.2	48.5	40.1	10.2	125.82842	21-22
23	-20.571	-27.359	1194.27753	-9.2	5.7	-80.1	68.5	55.40197	0.815	-99.4	62.4	53.7	37.2	0.7	115.15781	22-23
24	-20.567	-31.407	1188.83958	4.7	1.3	-77.9	76.1	54.36608	0.832	-98.7	58.9	58.9	36.6	-8.4	109.12884	23-24
25	-16.422	-31.492	1122.70952	6.2	1.4	-78.2	72.4	52.08855	0.910	-94.5	57.9	58.4	27.2	-4.9	125.58420	24-25
26	-12.723	-31.577	1079.82881	9.2	1.5	-78.9	68.1	50.36930	0.967	-90.2	57.1	58.3	18.1	-3.0	112.06682	25-26
27	-9.314	-31.664	1055.65123	17.5	1.5	-79.9	60.7	48.65242	0.992	-85.9	56.5	58.4	9.5	-2.3	103.26440	26-27
28	-6.507	-31.742	1047.62074	60.4	1.6	-80.9	55.8	46.67564	0.969	-82.2	56.2	58.8	3.3	-2.6	85.07265	27-28

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JULY 31, 1964 13 HR 17 MIN 55 SEC 270 MS

TAB NO 107 ATLAS PHOTO NO 107 POD SEQUENCE NO 220

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				473.529	1036.03036	-5.869	-30.629	2771.486	2.174	-70.947	116.364
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.216	-19.346	1138.68610	-24.8	6.5	-80.8	57.9	52.54129	0.896	-93.5	68.8 39.9 31.4 28.2 0- 1
2	-12.479	-24.570	1090.64325	-38.7	6.4	-81.1	51.3	51.83208	0.919	-90.2	63.9 47.5 23.2 14.9 159.50081 1- 2
3	-9.164	-28.309	1047.37842	-32.0	3.4	-80.6	52.9	49.32737	0.992	-85.6	59.8 53.1 10.7 6.3 149.85394 2- 3
4	-8.989	-24.931	1065.03873	-57.2	5.2	-81.1	44.9	50.37594	0.961	-85.2	63.1 47.7 17.0 15.1 101.16255 3- 4
5	-8.802	-21.329	1100.11790	-57.2	6.9	-81.4	38.1	51.77156	0.914	-84.8	66.6 42.3 25.1 24.1 107.94836 4- 5
6	-12.390	-20.798	1128.19907	-52.0	8.7	-82.1	44.5	53.36334	0.871	-90.3	67.5 42.1 29.8 24.2 109.79914 5- 6
7	-16.312	-20.081	1178.08099	-40.8	11.1	-83.2	50.1	55.48828	0.810	-95.8	68.7 42.4 36.6 23.0 120.64634 6- 7
8	-16.280	-24.100	1136.35445	-28.4	7.9	-81.5	56.7	53.74859	0.860	-95.3	64.9 47.8 31.1 13.4 116.83413 7- 8
9	-16.301	-27.824	1115.06248	-12.3	4.7	-79.9	64.0	52.47428	0.893	-94.8	61.3 53.1 27.7 4.1 108.27894 8- 9
10	-12.585	-28.091	1071.69234	-17.9	3.2	-80.1	59.0	50.69123	0.951	-90.2	60.5 52.9 18.8 5.9 112.82698 9-10
11	-9.164	-28.309	1047.37842	-32.0	3.4	-80.6	52.9	49.32737	0.992	-85.6	59.8 53.1 10.7 6.3 103.82973 10-11
12	-6.552	-31.626	1037.05382	58.6	1.7	-80.9	55.6	46.20170	0.969	-82.2	56.3 58.8 3.2 -2.5 127.13031 11-12
13	-6.346	-28.470	1039.44492	-73.5	3.0	-81.1	47.3	47.68868	0.985	-81.6	59.4 53.6 5.9 5.8 95.20085 12-13
14	-6.117	-25.182	1056.60320	-83.2	4.4	-81.2	38.4	49.39842	0.984	-80.9	62.6 48.3 14.4 14.3 99.23048 13-14
15	-5.857	-21.684	1090.47751	-85.7	5.6	-81.1	31.7	50.71234	0.938	-80.0	66.1 43.0 23.1 23.1 105.68524 14-15
16	-5.554	-17.860	1144.13753	-86.9	6.7	-80.8	26.2	52.44927	0.875	-79.0	69.9 37.8 32.2 32.0 115.60733 15-16
17	-8.599	-17.377	1155.95303	-73.6	8.5	-81.7	32.3	53.62667	0.849	-84.2	70.5 37.0 33.8 33.4 93.37021 16-17
18	-12.319	-16.628	1188.26064	-60.4	11.1	-83.1	38.5	55.42139	0.804	-90.3	71.6 36.7 37.8 33.8 114.84622 17-18
19	-16.414	-15.582	1245.20398	-49.9	14.3	-85.1	44.1	57.85756	0.738	-96.4	73.0 37.1 43.8 33.0 127.78266 18-19
20	-21.136	-14.043	1335.74522	-41.8	18.9	-88.2	49.1	61.27998	0.645	-102.3	75.0 38.1 51.5 31.0 149.68971 19-20
21	-20.771	-19.072	1256.29745	-33.1	14.5	-84.9	55.0	58.37352	0.725	-101.2	70.3 43.2 44.9 20.2 142.68642 20-21
22	-20.566	-23.462	1207.50943	-22.2	10.1	-82.4	61.4	56.31812	0.780	-100.2	66.2 48.5 40.0 10.3 124.57375 21-22
23	-20.472	-27.481	1182.20856	-9.3	5.7	-80.2	68.3	54.84185	0.815	-99.4	62.5 53.7 37.1 0.8 114.02659 22-23
24	-20.466	-31.288	1176.61462	4.5	1.3	-78.0	75.8	53.80683	0.833	-98.7	59.0 58.9 36.5 -8.2 108.02673 23-24
25	-16.366	-31.374	1111.35941	6.0	1.4	-78.3	72.1	51.56192	0.910	-94.5	58.0 58.4 27.1 -4.8 124.19753 24-25
26	-12.705	-31.461	1068.98648	8.9	1.5	-79.0	67.8	49.86362	0.967	-90.2	57.2 58.3 18.1 -2.9 110.90843 25-26
27	-9.331	-31.548	1045.05077	16.8	1.6	-79.9	60.4	48.16187	0.992	-85.9	56.7 58.4 9.5 -2.2 102.22736 26-27
28	-6.552	-31.626	1037.05382	58.6	1.7	-80.9	55.6	46.20170	0.969	-82.2	56.3 58.8 3.2 -2.5 84.22079 27-28

JULY 31, 1964 13 HR 18 MIN 0 SEC 390 MS

TAB NO 108 ATLAS PHOTO NO 108 POD SEQUENCE NO 222

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				468.409	1025.50320	-5.903	-30.561	2760.958	2.177	-70.899	116.354
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.207	-19.365	1127.22327	-25.0	6.5	-80.8	57.7	52.01992	0.896	-93.5	68.8 39.9 31.4 28.2 0- 1
2	-12.465	-24.522	1079.86201	-38.8	6.4	-81.1	51.2	51.81970	0.919	-90.2	63.9 47.5 23.2 15.0 157.54763 1- 2
3	-9.182	-28.225	1036.90442	-32.3	3.4	-80.6	52.8	48.83410	0.991	-85.6	59.9 53.1 10.7 6.4 148.39860 2- 3
4	-9.009	-24.880	1054.50137	-57.2	5.2	-81.1	44.9	49.87747	0.960	-85.2	63.2 47.7 17.1 15.2 100.17568 3- 4
5	-8.825	-21.313	1089.29247	-68.0	6.9	-81.4	38.1	51.26203	0.914	-84.8	66.7 42.3 25.1 24.1 106.90177 4- 5
6	-12.376	-20.786	1117.10396	-52.0	8.7	-82.1	44.5	52.83857	0.871	-90.3	67.5 42.1 29.8 24.2 108.72027 5- 6
7	-16.259	-20.078	1166.40700	-40.9	11.1	-83.2	50.0	54.93310	0.810	-95.8	68.7 42.4 36.6 23.0 119.41913 6- 7
8	-16.227	-24.056	1125.04955	-28.5	7.9	-81.5	56.5	53.21383	0.861	-95.3	64.9 47.8 31.1 13.4 115.68981 7- 8
9	-16.247	-27.743	1103.84875	-12.5	4.7	-80.0	63.8	51.94650	0.894	-94.8	61.4 53.1 27.7 4.2 107.21958 8- 9
10	-12.569	-28.009	1060.98181	-18.1	4.0	-80.1	58.8	50.18463	0.951	-90.2	60.6 52.9 18.8 6.0 111.66918 9-10
11	-9.182	-28.225	1036.90442	-32.3	3.4	-80.6	52.8	48.83410	0.991	-85.6	59.9 53.1 10.7 6.4 102.79288 10-11
12	-6.597	-31.510	1026.47818	56.8	1.7	-80.9	55.3	45.72762	0.969	-82.2	56.4 58.8 3.2 -2.4 125.86279 11-12
13	-6.393	-28.385	1028.99928	-73.3	3.0	-81.1	47.2	47.21695	0.985	-81.6	59.5 53.6 6.0 5.9 94.24083 12-13
14	-6.166	-25.129	1046.09369	-83.0	4.4	-81.2	38.4	48.90691	0.984	-80.9	62.7 48.3 14.4 14.4 98.25683 13-14
15	-5.908	-21.665	1079.68745	-85.6	5.6	-81.1	31.8	50.21030	0.938	-80.0	66.1 43.0 23.2 23.1 104.65424 14-15
16	-5.608	-17.879	1132.79984	-86.8	6.7	-80.8	26.3	51.92927	0.875	-79.0	69.8 37.8 32.2 31.9 114.45456 15-16
17	-8.623	-17.400	1144.56018	-73.6	8.6	-81.7	32.3	53.09809	0.850	-84.2	70.5 37.0 33.8 33.3 92.45509 16-17
18	-12.306	-16.659	1176.54231	-60.4	11.0	-83.1	38.6	54.87496	0.804	-90.3	71.5 36.7 37.8 33.8 113.71169 17-18
19	-16.360	-15.626	1232.79080	-49.9	14.3	-85.1	44.1	57.28096	0.739	-96.4	72.9 37.1 43.7 33.0 126.45703 18-19
20	-21.029	-14.113	1322.04562	-41.8	18.8	-88.1	49.1	60.65157	0.646	-102.3	74.9 38.1 51.4 30.9 147.95068 19-20
21	-20.670	-19.084	1243.58896	-33.1	14.4	-85.0	54.9	57.78291	0.726	-101.2	70.2 43.2 44.8 20.2 141.13093 20-21
22	-20.467	-23.427	1195.28598	-22.3	10.1	-82.5	61.2	55.74781	0.781	-100.2	66.2 48.5 39.9 10.3 123.31598 21-22
23	-20.372	-27.403	1170.12273	-9.5	5.7	-80.3	68.1	54.28097	0.816	-99.4	62.5 53.7 37.0 1.0 112.89284 22-23
24	-20.364	-31.169	1164.37872	4.4	1.4	-78.1	75.5	53.24710	0.834	-98.7	59.1 58.9 36.3 -8.1 106.92344 23-24
25	-16.310	-31.257	1099.99641	5.8	1.4	-78.4	71.8	51.03469	0.911	-94.5	58.1 58.4 27.0 -4.7 122.81124 24-25
26	-12.688	-31.344	1058.13181	8.5	1.5	-79.1	67.4	49.35737	0.968	-90.2	57.4 58.3 18.1 -2.8 109.74867 25-26
27	-9.348	-31.432	1034.43954	16.2	1.6	-80.0	60.1	47.67096	0.992	-85.9	56.8 58.4 9.5 -2.1 101.18896 26-27
28	-6.597	-31.510	1026.47818	56.8	1.7	-80.9	55.3	45.72762	0.969	-82.2	56.4 58.8 3.2 -2.4 83.36799 27-28

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JULY 31, 1964 13 HR 18 MIN 5 SEC 510 MS

TAB NO 109

ATLAS PHOTO NO 109

POD SEQUENCE NO 224

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				463.289	1014.96426	-5.936	-30.493	2750.420	2.180	-70.850	116.345					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.198	-19.384	1115.74559	-25.1	6.5	-80.9	57.5	51.49732	0.896	-93.5	68.8	39.9	31.3	28.1	0.	0-1
2	-12.450	-24.474	1069.05612	-38.9	6.4	-81.2	51.1	50.80616	0.919	-90.2	64.0	47.5	23.2	15.0	155.60675	1-2
3	-9.200	-28.142	1026.41383	-32.6	3.4	-80.6	52.6	48.34005	0.991	-85.6	60.0	53.1	10.8	6.5	146.93847	2-3
4	-9.029	-24.830	1043.94339	-57.3	5.2	-81.1	44.8	49.37804	0.960	-85.2	63.2	47.7	17.1	15.2	99.18651	3-4
5	-8.846	-21.297	1078.44263	-68.0	6.9	-81.4	38.2	50.75136	0.914	-84.8	66.7	42.3	25.1	24.2	105.85196	4-5
6	-12.363	-20.776	1105.97987	-52.1	8.7	-82.1	44.4	52.31243	0.871	-90.3	67.5	42.1	29.8	24.2	107.63784	5-6
7	-16.205	-20.076	1154.69974	-40.9	11.1	-83.2	49.9	54.38175	0.811	-95.8	68.7	42.4	36.5	23.0	118.18752	6-7
8	-16.174	-24.014	1113.71623	-28.6	7.9	-81.6	56.4	52.67772	0.861	-95.3	64.9	47.8	31.0	13.5	114.54111	7-8
9	-16.192	-27.663	1092.61172	-12.6	4.7	-80.1	63.6	51.41763	0.894	-94.8	61.5	53.2	27.7	4.3	106.15695	8-9
10	-12.553	-27.927	1050.25113	-18.4	4.0	-80.2	58.6	49.67709	0.951	-90.2	60.6	52.9	18.8	6.0	110.50836	9-10
11	-9.200	-28.142	1026.41383	-32.6	3.4	-80.6	52.6	48.34005	0.991	-85.6	60.0	53.1	10.8	6.5	101.75361	10-11
12	-6.641	-31.393	1015.89388	54.9	1.7	-80.9	55.1	45.25341	0.969	-82.2	56.5	58.8	3.1	-2.3	124.59343	11-12
13	-6.439	-28.300	1018.54056	-73.1	3.1	-81.1	47.1	46.74449	0.985	-81.6	59.6	53.6	6.0	6.0	93.27998	12-13
14	-6.214	-25.077	1035.56729	-82.9	4.4	-81.2	38.4	48.41461	0.984	-80.9	62.7	48.3	14.5	14.4	97.28123	13-14
15	-5.958	-21.646	1068.87715	-85.5	5.6	-81.1	31.9	49.70734	0.938	-80.0	66.1	43.0	23.2	23.1	103.60260	14-15
16	-5.662	-17.898	1121.43896	-86.7	6.8	-80.8	26.4	51.40824	0.875	-79.0	69.8	37.8	32.1	31.9	113.29874	15-16
17	-8.647	-17.423	1133.13943	-73.6	8.6	-81.7	32.4	52.56824	0.850	-84.2	70.5	37.1	33.8	33.3	91.53735	16-17
18	-12.293	-16.690	1164.79095	-60.4	11.0	-83.1	38.6	54.32699	0.805	-90.3	71.5	36.7	37.8	33.8	112.57282	17-18
19	-16.305	-15.672	1220.33986	-49.9	14.2	-85.1	44.1	56.70261	0.740	-96.4	72.8	37.1	43.7	32.9	125.12655	18-19
20	-20.971	-14.184	1308.30611	-41.9	18.7	-88.1	44.0	60.02134	0.648	-102.3	74.8	38.1	51.3	30.8	146.20828	19-20
21	-20.567	-19.097	1230.84342	-33.2	14.4	-85.0	54.8	57.19061	0.727	-101.2	70.2	43.2	44.7	20.2	139.57086	20-21
22	-20.366	-23.393	1183.03125	-22.4	10.1	-82.5	61.0	55.17605	0.762	-100.2	64.2	48.5	39.8	10.4	122.05329	21-22
23	-20.272	-27.326	1158.01166	-9.6	5.8	-80.4	67.9	53.71893	0.817	-99.4	62.6	53.7	37.0	1.1	111.75332	22-23
24	-20.261	-31.050	1152.12456	4.2	1.4	-78.2	75.2	52.68657	0.836	-98.7	59.2	58.9	36.2	-7.9	105.81822	23-24
25	-16.254	-31.140	1088.61591	5.5	1.5	-78.5	71.5	50.50667	0.911	-94.5	58.2	58.4	27.0	-4.6	121.42338	24-25
26	-12.670	-31.228	1047.26192	8.2	1.5	-79.1	67.1	48.85041	0.968	-90.2	57.5	58.3	18.0	-2.7	108.58678	25-26
27	-9.364	-31.316	1023.81633	15.5	1.6	-80.0	59.8	47.17954	0.992	-85.9	56.9	58.4	9.5	-2.0	100.14864	26-27
28	-6.641	-31.393	1015.89388	54.9	1.7	-80.9	55.1	45.25341	0.969	-82.2	56.5	58.8	3.1	-2.3	82.51402	27-28

JULY 31, 1964 13 HR 18 MIN 10 SEC 630 MS

TAB NO 110

ATLAS PHOTO NO 110

POD SEQUENCE NO 226

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				458.169	1004.41327	-5.970	-30.424	2739.869	2.183	-70.800	116.336					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.189	-19.403	1104.25281	-25.3	6.5	-80.9	57.4	50.97397	0.896	-93.5	68.7	39.9	31.3	28.1	0.	0-1
2	-12.435	-24.427	1058.23430	-39.0	6.4	-81.2	51.0	50.29186	0.919	-90.2	64.0	47.5	23.2	15.1	153.66735	1-2
3	-9.218	-28.058	1015.91027	-32.9	3.4	-80.6	52.4	47.84539	0.991	-85.6	60.1	53.1	10.9	6.6	145.47573	2-3
4	-9.049	-24.779	1033.37004	-57.3	5.2	-81.1	44.8	48.87788	0.960	-85.2	63.3	47.7	17.2	15.3	98.19571	3-4
5	-8.868	-21.281	1067.57568	-67.9	6.9	-81.4	38.2	50.23990	0.914	-84.8	66.7	42.3	25.1	24.2	104.80024	4-5
6	-12.349	-20.765	1094.83813	-52.1	8.7	-82.1	44.4	51.78545	0.871	-90.3	67.5	42.1	29.8	24.2	106.55372	5-6
7	-16.152	-20.074	1142.97565	-41.0	11.0	-83.2	49.8	53.82961	0.811	-95.8	68.7	42.4	36.5	23.0	116.95479	6-7
8	-16.120	-23.971	1102.36768	-28.7	7.9	-81.6	56.3	52.14090	0.861	-95.3	65.0	47.8	31.0	13.5	113.39043	7-8
9	-16.138	-27.583	1081.36218	-12.8	4.7	-80.1	63.4	50.88817	0.894	-94.8	61.5	53.2	27.6	4.4	105.09261	8-9
10	-12.537	-27.845	1039.50706	-18.6	4.0	-80.2	58.4	49.16891	0.951	-90.2	60.7	52.9	18.9	6.1	109.34670	9-10
11	-9.218	-28.058	1015.91027	-32.9	3.4	-80.6	52.4	47.84539	0.991	-85.6	60.1	53.1	10.9	6.6	100.71296	10-11
12	-6.686	-31.277	1005.30067	52.9	1.7	-80.8	54.8	44.77904	0.969	-82.2	56.6	58.8	3.0	-2.2	123.32266	11-12
13	-6.485	-28.216	1008.06989	-72.8	3.1	-81.1	47.1	46.27145	0.986	-81.6	59.6	53.6	6.1	6.1	92.31832	12-13
14	-6.262	-25.025	1025.02670	-82.7	4.4	-81.1	38.4	47.92166	0.984	-80.9	62.8	48.3	14.5	14.5	96.30416	13-14
15	-6.009	-21.628	1058.05103	-85.4	5.6	-81.1	32.0	49.20365	0.938	-80.0	66.1	43.0	23.2	23.1	102.58515	14-15
16	-5.716	-17.918	1110.06174	-86.6	6.8	-80.8	26.6	50.88647	0.875	-79.0	69.8	37.8	32.1	31.9	112.14136	15-16
17	-8.671	-17.446	1121.70088	-73.5	8.6	-81.7	32.5	52.03756	0.850	-84.2	70.5	37.1	33.8	33.3	90.61806	16-17
18	-12.280	-16.722	1153.02138	-60.4	11.0	-83.1	38.6	53.77817	0.805	-90.3	71.5	36.7	37.7	33.7	111.43233	17-18
19	-16.250	-15.717	1207.87254	-49.9	14.2	-85.1	44.0	56.12350	0.740	-96.4	72.8	37.1	43.6	32.9	123.79543	18-19
20	-20.814	-14.255	1294.55830	-41.9	18.6	-88.1	48.9	59.39071	0.650	-102.3	74.7	38.1	51.1	30.7	144.47046	19-20
21	-20.465	-19.110	1218.08664	-33.3	14.3	-85.0	54.7	56.59775	0.728	-101.2	70.2	43.2	44.6	20.2	138.01238	20-21
22	-20.266	-23.358	1170.76486	-22.5	10.0	-82.6	60.9	54.60376	0.783	-100.2	66.2	48.5	39.7	10.5	120.78934	21-22
23	-20.171	-27.249	1145.89165	-9.8	5.8	-80.4	67.6	53.15649	0.818	-99.4	62.6	53.7	36.9	1.2	110.61639	22-23
24	-20.159	-30.932	1139.86620	4.0	1.5	-78.4	74.9	52.12584	0.837	-98.7	59.3	58.9	36.1	-7.8	108.71254	23-24
25	-16.197	-31.023	1077.22678	5.3	1.5	-78.6	71.2	49.97825	0.912	-94.5	58.3	58.5	26.9	-4.4	120.03767	24-25
26	-12.651	-31.112	1036.38213	7.8	1.6	-79.2	66.8	48.34299	0.968	-90.2	57.6	58.3	18.0	-2.6	107.42459	25-26
27	-9.380	-31.200	1013.18330	14.8	1.6	-80.0	59.5	46.68789	0.992	-85.9	57.0	58.4	9.5	-1.9	99.10729	26-27
28	-6.686	-31.277	1005.30067	52.9	1.7	-80.8	54.8	44.77904	0.969	-82.2	56.6	58.8	3.0	-2.2	81.65921	27-28

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TAB NO 111

ATLAS PHOTO NO 111

POD SEQUENCE NO 228

JULY 31, 1964 13 HR 18 MIN 15 SEC 750 MS

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				453.049	993.85016	-6.005	-30.354	2729.305	2.187	-70.751	116.327
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.180	-19.421	1092.74483	-25.4	6.5	-81.0	57.2	50.44979	0.896	-93.5	68.7 40.0 31.2 28.0 0. 0-1
2	-12.420	-24.380	1047.39403	-39.2	6.4	-81.2	50.8	49.77669	0.919	-90.2	64.0 47.5 23.2 15.1 151.73616 1-2
3	-9.236	-27.975	1005.39268	-33.2	3.5	-80.6	52.3	47.35006	0.991	-85.6	60.2 53.1 10.9 6.7 144.00968 2-3
4	-9.068	-24.729	1022.77914	-57.3	5.2	-81.1	44.7	48.37689	0.980	-85.2	63.3 47.7 17.2 15.3 97.20295 3-4
5	-8.889	-21.266	1056.68817	-67.9	6.9	-81.4	38.2	49.72746	0.914	-84.8	66.7 42.3 25.1 24.2 103.74583 4-5
6	-12.335	-20.755	1083.67468	-52.2	8.7	-82.1	44.4	51.25745	0.871	-90.3	67.5 42.1 29.8 24.2 105.46737 5-6
7	-16.098	-20.073	1131.23007	-41.1	11.0	-83.2	49.8	53.27646	0.812	-95.8	68.7 42.4 36.5 23.0 115.72033 6-7
8	-16.066	-23.929	1091.00087	-28.9	7.9	-81.7	56.1	51.60321	0.861	-92.3	65.0 47.8 31.0 13.6 112.23689 7-8
9	-16.083	-27.503	1070.09551	13.0	4.7	-80.2	63.1	50.35805	0.894	-94.8	61.6 53.2 27.6 4.5 104.02613 8-9
10	-12.520	-27.763	1028.74829	-18.9	4.0	-80.3	58.2	48.66004	0.951	-90.2	60.8 52.9 18.9 6.2 108.18403 9-10
11	-9.236	-27.975	1005.39268	-33.2	3.5	-80.6	52.3	47.35006	0.991	-85.6	60.2 53.1 10.9 6.7 99.67094 10-11
12	-6.730	-31.161	994.69872	50.8	1.7	-80.8	54.6	44.30455	0.969	-82.2	56.8 58.8 3.0 -2.1 122.05045 11-12
13	-6.531	-28.132	997.58642	-72.6	3.1	-81.0	47.0	45.79773	0.986	-81.6	59.7 53.6 6.2 6.1 91.35581 12-13
14	-6.310	-24.972	1014.46990	-82.5	4.4	-81.1	38.5	47.42795	0.983	-80.9	62.8 48.3 14.6 14.5 95.32526 13-14
15	-6.060	-21.610	1047.20584	-85.3	5.7	-81.0	32.1	48.69908	0.938	-80.0	66.2 43.0 23.2 23.1 101.54724 14-15
16	-5.770	-17.937	1098.66316	-86.5	6.8	-80.7	26.7	50.36373	0.876	-79.0	69.8 37.9 32.1 31.9 110.98128 15-16
17	-8.695	-17.470	1110.23927	-73.5	8.6	-81.7	32.5	51.50582	0.850	-84.2	70.4 37.1 33.7 33.3 89.69680 16-17
18	-12.267	-16.754	1141.22766	-60.4	11.0	-83.1	38.6	53.22823	0.806	-90.3	71.4 36.8 37.7 33.7 110.28948 17-18
19	-16.195	-15.763	1195.38188	-50.0	14.1	-85.1	44.0	55.54329	0.741	-96.4	72.8 37.1 43.5 32.8 122.46280 18-19
20	-20.706	-14.326	1280.79340	-42.0	18.5	-88.0	48.9	58.75930	0.652	-102.3	74.7 38.1 51.0 30.7 142.73551 19-20
21	-20.363	-19.123	1205.31123	-33.4	14.2	-85.0	54.6	56.00404	0.730	-101.2	70.2 43.3 44.5 20.2 136.45330 20-21
22	-20.165	-23.324	1158.48299	-22.6	10.0	-82.6	60.7	54.03075	0.784	-100.2	66.2 48.5 39.7 10.5 119.52299 21-22
23	-20.070	-27.172	1133.76060	-9.9	5.8	-80.5	67.4	52.59353	0.819	-99.4	62.7 53.8 36.8 1.3 109.47534 22-23
24	-20.056	-30.813	1127.60281	3.8	1.5	-78.5	74.6	51.56490	0.838	-98.7	59.3 58.9 36.0 -7.6 103.60616 23-24
25	-16.140	-30.907	1065.82860	5.1	1.5	-78.7	70.8	49.44942	0.912	-94.5	58.4 58.5 26.8 -4.3 118.65362 24-25
26	-12.633	-30.996	1025.49214	7.5	1.6	-79.2	66.5	47.83510	0.968	-90.2	57.8 58.3 18.0 -2.4 106.26206 25-26
27	-9.396	-31.085	1002.54045	14.1	1.6	-80.0	59.2	46.19599	0.992	-85.9	57.1 58.4 9.5 -1.8 98.06500 26-27
28	-6.730	-31.161	994.69872	50.8	1.7	-80.8	54.6	44.30455	0.969	-82.2	56.8 58.8 3.0 -2.1 80.80368 27-28

TAB NO 112

ATLAS PHOTO NO 112

POD SEQUENCE NO 230

JULY 31, 1964 13 HR 18 MIN 20 SEC 870 MS

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				447.930	983.27493	-6.039	-30.284	2718.730	2.190	-70.701	116.317
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.171	-19.440	1081.22168	-25.6	6.5	-81.0	57.0	49.92470	0.896	-93.5	68.7 40.0 31.2 28.0 0. 0-1
2	-12.405	-24.333	1036.53389	-39.3	6.4	-81.2	50.7	49.26056	0.919	-90.2	64.1 47.5 23.3 15.1 149.81728 1-2
3	-9.254	-27.892	994.86047	-33.5	3.5	-80.6	52.1	46.85405	0.991	-85.6	60.2 53.1 11.0 6.7 142.54009 2-3
4	-9.088	-24.679	1012.16943	-57.3	5.2	-81.1	44.6	47.87501	0.959	-85.2	63.4 47.7 17.2 15.4 96.20802 3-4
5	-8.911	-21.251	1045.77797	-67.9	6.9	-81.4	38.2	49.21397	0.913	-84.8	66.7 42.4 25.1 24.2 102.68833 4-5
6	-12.321	-20.746	1072.48727	-52.2	8.7	-82.1	44.3	50.72831	0.871	-90.3	67.6 42.1 29.8 24.3 104.37847 5-6
7	-16.044	-20.072	1119.46031	-41.1	11.0	-83.3	49.7	52.72217	0.812	-95.8	68.7 42.4 36.4 23.0 114.48388 6-7
8	-16.012	-23.887	1079.61418	-29.0	7.9	-81.7	56.0	51.06458	0.862	-95.3	65.0 47.8 30.9 13.6 111.07985 7-8
9	-16.028	-27.424	1058.81976	-13.2	4.7	-80.3	62.9	49.82723	0.895	-94.8	61.7 53.2 27.5 4.6 102.95717 8-9
10	-12.503	-27.681	1017.97417	-19.1	4.0	-80.3	58.0	48.15044	0.951	-90.2	60.9 53.0 18.9 6.3 107.02017 9-10
11	-9.254	-27.892	994.86047	-33.5	3.5	-80.6	52.1	46.85405	0.991	-85.6	60.2 53.1 11.0 6.7 98.62733 10-11
12	-6.774	-31.046	984.08807	48.7	1.7	-80.8	54.4	43.82992	0.969	-82.2	56.9 58.8 2.9 -1.9 120.77662 11-12
13	-6.577	-28.048	987.08965	-72.4	3.1	-81.0	46.9	45.32328	0.986	-81.6	59.8 53.6 6.3 6.2 90.39239 12-13
14	-6.358	-24.921	1003.89579	-82.4	4.4	-81.1	38.5	46.93344	0.983	-80.9	62.9 48.3 14.6 14.6 94.34438 13-14
15	-6.111	-21.592	1036.33971	-85.1	5.7	-81.0	32.2	48.19355	0.938	-80.0	66.2 43.0 23.2 23.1 100.50651 14-15
16	-5.824	-17.958	1087.24046	-86.4	6.8	-80.7	26.8	49.83991	0.876	-79.0	69.8 37.9 32.1 31.9 109.81792 15-16
17	-8.718	-17.495	1098.75153	-73.4	8.6	-81.7	32.6	50.97288	0.851	-84.2	70.4 37.1 33.7 33.2 88.77340 16-17
18	-12.254	-16.787	1129.40637	-60.4	11.0	-83.1	38.6	52.67700	0.806	-90.3	71.4 36.8 37.6 33.6 109.14368 17-18
19	-16.139	-15.810	1182.86383	-50.0	14.1	-85.1	44.0	54.96181	0.742	-96.4	72.7 37.1 43.5 32.8 121.12813 18-19
20	-20.597	-14.397	1267.00623	-42.0	18.4	-88.0	48.8	58.12687	0.654	-102.3	74.6 38.1 50.9 30.6 141.00234 19-20
21	-20.260	-19.136	1192.51439	-33.4	14.1	-85.0	54.5	55.40934	0.731	-101.2	70.1 43.3 44.4 20.2 134.89233 20-21
22	-20.065	-23.291	1146.18361	-22.7	10.0	-82.7	60.5	53.45693	0.785	-100.2	66.3 48.5 39.6 10.6 118.25341 21-22
23	-19.970	-27.095	1121.61737	-10.1	5.8	-80.6	67.2	52.03003	0.820	-99.4	62.7 53.8 36.7 1.4 108.33188 22-23
24	-19.954	-30.696	1115.33418	3.7	1.6	-78.6	74.3	51.00374	0.839	-98.7	59.4 58.9 35.9 -7.5 102.49897 23-24
25	-16.083	-30.790	1054.42120	4.8	1.6	-78.8	70.5	48.92016	0.913	-94.5	58.5 58.5 26.8 -4.2 117.27142 24-25
26	-12.614	-30.881	1014.59191	7.1	1.6	-79.3	66.2	47.32672	0.968	-90.2	57.8 58.3 17.9 -2.3 105.09912 25-26
27	-9.412	-30.969	991.88776	13.4	1.6	-80.0	58.9	45.70386	0.992	-85.9	57.2 58.4 9.5 -1.7 97.02166 26-27
28	-6.774	-31.046	984.08807	48.7	1.7	-80.8	54.4	43.82992	0.969	-82.2	56.9 58.8 2.9 -1.9 79.94732 27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 18 MIN 25 SEC 990 MS

TAB NO 113

ATLAS PHOTO NO 113

POD SEQUENCE NO 232

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				442.810		972.68729		-6.074		-30.213		2708.143		2.193		-70.651		116.307	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.162	-19.459	1069.68303	-25.7	6.5	-81.1	56.9	49.39885	0.897	-93.5	68.7	40.0	31.1	28.0	0.	0-1			
2	-12.390	-24.287	1025.65726	-39.4	6.4	-81.3	50.6	48.74366	0.919	-90.2	64.1	47.5	23.3	15.2	147.89980	1-2			
3	-9.272	-27.809	984.31471	-33.7	3.5	-80.6	52.0	46.35739	0.990	-85.6	60.3	53.1	11.0	6.8	141.06771	2-3			
4	-9.107	-24.629	1001.54380	-57.4	5.3	-81.1	44.6	47.37238	0.959	-85.2	63.4	47.7	17.3	15.4	95.21139	3-4			
5	-8.932	-21.236	1034.85019	-67.8	7.0	-81.4	38.2	48.69964	0.913	-84.8	66.7	42.4	25.2	24.2	101.62883	4-5			
6	-12.307	-20.736	1061.28171	-52.2	8.7	-82.2	44.3	50.19832	0.872	-90.3	67.6	42.1	29.8	24.3	103.28788	5-6			
7	-15.990	-20.071	1107.67329	-41.2	10.9	-83.3	49.6	52.16706	0.812	-95.8	68.6	42.4	36.4	23.0	113.24611	6-7			
8	-15.958	-23.846	1068.21172	-29.1	7.9	-81.8	55.8	50.52521	0.862	-95.3	65.0	47.8	30.9	13.7	109.92087	7-8			
9	-15.973	-27.344	1047.52800	-13.4	4.7	-80.3	62.7	49.29580	0.895	-94.8	61.7	53.2	27.5	4.7	101.88643	8-9			
10	-12.487	-27.600	1007.18604	-19.3	4.0	-80.3	57.8	47.64018	0.950	-90.2	60.9	53.0	18.9	6.4	105.85574	9-10			
11	-9.272	-27.809	984.31471	-33.7	3.5	-80.6	52.0	46.35739	0.990	-85.6	60.3	53.1	11.0	6.8	97.58226	10-11			
12	-6.818	-30.930	973.46793	-46.6	1.7	-80.8	54.1	43.35509	0.969	-82.2	57.0	58.8	2.9	-1.8	119.50132	11-12			
13	-6.623	-27.963	976.58037	-72.2	3.1	-81.0	46.8	44.84821	0.986	-81.6	59.9	53.6	6.4	6.3	89.42810	12-13			
14	-6.406	-24.869	993.30693	-82.2	4.4	-81.1	38.5	46.43824	0.983	-80.9	63.0	48.3	14.7	14.6	93.36197	13-14			
15	-6.161	-21.574	1025.45729	-85.0	5.7	-81.0	32.3	47.68727	0.938	-80.0	66.2	43.0	23.2	23.2	99.46390	14-15			
16	-5.878	-17.979	1075.80096	-86.3	6.9	-80.7	27.0	49.31531	0.876	-79.0	69.8	37.9	32.1	31.8	108.65301	15-16			
17	-8.742	-17.520	1087.24561	-73.4	8.6	-81.7	32.7	50.43909	0.851	-84.2	70.4	37.1	33.7	33.2	87.84857	16-17			
18	-12.240	-16.819	1117.56651	-60.4	11.0	-83.1	38.6	52.12490	0.807	-90.3	71.4	36.8	37.6	33.6	107.99615	17-18			
19	-16.084	-15.856	1170.32921	-50.0	14.0	-85.1	44.0	54.37955	0.743	-96.4	72.7	37.1	43.4	32.7	119.79304	18-19			
20	-20.489	-14.466	1253.21062	-42.1	18.3	-88.0	48.8	57.49404	0.655	-102.3	74.5	38.1	50.8	30.5	139.27370	19-20			
21	-20.157	-19.150	1179.70494	-33.5	14.1	-85.1	54.3	54.81406	0.732	-101.1	70.1	43.3	44.3	20.2	133.33302	20-21			
22	-17.264	-23.256	1133.87207	-27.8	9.9	-82.7	60.4	52.88255	0.786	-100.2	66.3	48.5	39.5	10.7	116.98263	21-22			
23	-19.869	-27.019	1109.46668	-10.2	5.8	-80.7	66.9	51.46610	0.821	-99.4	62.8	53.6	30.6	1.5	137.13595	22-23			
24	-19.851	-30.578	1103.06055	-3.5	1.6	-78.7	74.0	50.44624	0.840	-98.7	59.5	58.9	35.8	-7.3	101.39118	23-24			
25	-16.026	-30.674	1043.00458	-4.6	1.6	-78.9	70.2	48.39047	0.913	-94.5	58.6	58.5	26.7	-4.0	115.89106	24-25			
26	-12.596	-30.765	1003.68113	-6.8	1.6	-79.3	65.8	46.81785	0.969	-90.2	57.9	58.3	17.9	-2.2	103.93586	25-26			
27	-9.428	-30.854	981.22462	-12.7	1.7	-80.1	58.6	45.21144	0.992	-85.9	57.4	58.4	9.5	-1.6	95.97739	26-27			
28	-6.818	-30.930	973.46793	-46.6	1.7	-80.8	54.1	43.35509	0.969	-82.2	57.0	58.8	2.9	-1.8	79.09003	27-28			

JULY 31, 1964 13 HR 18 MIN 31 SEC 110 MS

TAB NO 114

ATLAS PHOTO NO 114

POD SEQUENCE NO 234

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				437.690		962.08749		-6.109		-30.142		2697.543		2.196		-70.600		116.298	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.153	-19.477	1058.12903	-25.9	6.5	-81.1	56.7	48.87242	0.897	-93.5	68.7	40.0	31.1	27.9	0.	0-1			
2	-12.375	-24.239	1014.76869	-39.5	6.4	-81.3	50.5	48.22619	0.919	-90.2	64.2	47.5	23.3	15.2	145.96781	1-2			
3	-9.289	-27.725	973.75727	-34.0	3.5	-80.6	51.8	45.86019	0.990	-85.6	60.4	53.1	11.1	6.9	139.59392	2-3			
4	-9.127	-24.579	990.90649	-57.4	5.3	-81.1	44.5	46.86919	0.959	-85.2	63.5	47.8	17.3	15.5	94.21381	3-4			
5	-8.954	-21.221	1023.91193	-67.8	7.0	-81.4	38.3	48.18483	0.913	-84.8	66.8	42.4	25.2	24.2	100.56878	4-5			
6	-12.293	-20.726	1050.06554	-52.3	8.7	-82.2	44.2	49.66782	0.872	-90.3	67.6	42.1	29.8	24.3	102.19624	5-6			
7	-15.935	-20.070	1095.87752	-41.3	10.9	-83.3	49.5	51.61154	0.813	-95.8	68.6	42.4	36.3	23.0	112.00852	6-7			
8	-15.904	-23.803	1056.79848	-29.2	7.8	-81.8	55.7	49.98533	0.862	-95.3	65.1	47.8	30.9	13.7	108.76178	7-8			
9	-15.917	-27.264	1036.22531	-13.6	4.8	-80.4	62.5	48.76384	0.895	-94.8	61.8	53.2	27.5	4.8	100.81488	8-9			
10	-12.470	-27.518	996.38595	-19.6	4.0	-80.4	57.6	47.12935	0.950	-90.2	61.0	53.0	18.9	6.4	104.69051	9-10			
11	-9.289	-27.725	973.75727	-34.0	3.5	-80.6	51.8	45.86019	0.990	-85.6	60.4	53.1	11.1	6.9	96.53616	10-11			
12	-6.863	-30.813	962.83805	-44.3	1.7	-80.8	53.9	42.88002	0.969	-82.2	57.1	58.8	2.8	-1.7	118.22493	11-12			
13	-6.669	-27.879	966.06042	-72.0	3.1	-81.0	46.8	44.37271	0.986	-81.6	60.0	53.6	6.5	6.4	88.46305	12-13			
14	-6.455	-24.816	982.70744	-82.0	4.5	-81.0	38.5	45.94255	0.983	-80.9	63.0	48.3	14.7	14.7	92.37869	13-14			
15	-6.212	-21.556	1014.56538	-84.9	5.7	-81.0	32.4	47.18054	0.938	-80.0	66.2	43.0	23.2	23.2	98.42086	14-15			
16	-5.931	-17.999	1064.35500	-86.2	6.9	-80.7	27.1	48.79042	0.876	-79.0	69.7	37.9	32.0	31.8	107.48884	15-16			
17	-8.765	-17.544	1075.73225	-73.3	8.6	-81.7	32.8	49.90494	0.851	-84.2	70.4	37.1	33.7	33.2	86.92282	16-17			
18	-12.227	-16.852	1105.71976	-60.4	10.9	-83.1	38.6	51.57247	0.807	-90.3	71.3	36.8	37.6	33.6	106.84824	17-18			
19	-16.028	-15.902	1157.79105	-50.1	13.9	-85.1	43.9	53.79713	0.744	-96.4	72.6	37.1	43.3	32.7	118.45905	18-19			
20	-20.381	-14.539	1239.42236	-42.1	18.1	-88.0	48.7	56.86155	0.657	-102.3	74.4	38.1	50.6	30.5	137.55239	19-20			
21	-20.054	-19.163	1166.89270	-33.6	14.0	-85.1	54.2	54.21864	0.733	-101.1	70.1	43.3	44.2	20.2	131.77972	20-21			
22	-19.863	-23.222	1121.55396	-22.9	9.9	-82.8	60.2	52.30786	0.787	-100.2	66.3	48.5	39.4	10.7	115.71291	21-22			
23	-19.768	-26.942	1097.30487	-10.4	5.8	-80.8	66.7	50.90183	0.822	-99.4	62.8	53.8	36.5	1.6	106.04164	22-23			
24	-19.749	-30.460	1090.78146	-3.3	1.7	-78.8	73.7	49.88069	0.841	-98.7	59.6	58.9	35.7	-7.1	100.28310	23-24			
25	-15.969	-30.557	1031.57828	-4.4	1.6	-78.9	69.9	47.86033	0.914	-94.5	58.7	58.5	26.6	-3.9	114.51259	24-25			
26	-12.577	-30.649	992.75941	-6.4	1.7	-79.4	65.5	46.30847	0.969	-90.2	58.0	58.3	17.9	-2.1	102.77229	25-26			
27	-9.444	-30.737	970.55078	-12.1	1.7	-80.1	58.3	44.71867	0.992	-85.9	57.5	58.4	9.5	-1.4	94.93209	26-27			
28	-6.863	-30.813	962.83805	-44.3	1.7	-80.8	53.9	42.88002	0.969	-82.2	57.1	58.8	2.8	-1.7	78.23192	27-28			

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JULY 31, 1964 13 HR 18 MIN 36 SEC 230 MS TAB NO 115 ATLAS PHOTO NO 115 POD SEQUENCE NO 236

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				432.570				951.47525	-6.144	-30.070	2686.931	2.199	-70.549	116.288		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.144	-19.496	1046.55948	-26.1	6.5	-81.2	56.5	48.34541	0.897	-93.5	68.7	40.1	31.0	27.9	0.	0-1
2	-12.359	-24.191	1003.86854	-39.6	6.4	-81.3	50.4	47.70817	0.918	-90.2	64.2	47.5	23.3	15.3	144.01865	1-2
3	-9.307	-27.641	963.18813	-34.3	3.5	-80.6	51.7	45.36244	0.990	-85.6	60.5	53.1	11.1	7.0	138.11871	2-3
4	-9.146	-24.528	980.25788	-57.4	5.3	-81.1	44.5	46.36547	0.959	-85.2	63.5	47.8	17.4	15.5	93.21536	3-4
5	-8.975	-21.205	1012.96394	-67.8	7.0	-81.4	38.3	47.66955	0.913	-84.8	66.8	42.4	25.2	24.2	99.50833	4-5
6	-12.278	-20.716	1038.83966	-52.3	8.7	-82.2	44.2	49.13687	0.872	-90.3	67.6	42.1	29.8	24.3	101.10378	5-6
7	-15.881	-20.067	1084.07394	-41.3	10.9	-83.3	49.4	51.05566	0.813	-95.8	68.6	42.4	36.3	23.0	110.77087	6-7
8	-15.849	-23.760	1045.37492	-29.3	7.8	-81.8	55.5	49.44496	0.862	-95.3	65.1	47.8	30.9	13.8	107.60284	7-8
9	-15.862	-27.184	1024.91167	-13.8	4.8	-80.4	62.2	48.23137	0.896	-94.8	61.9	53.2	27.4	4.9	99.14259	8-9
10	-12.453	-27.435	985.57388	-19.8	4.1	-80.4	57.4	46.61795	0.950	-90.2	61.1	53.0	18.9	6.5	103.52478	9-10
11	-9.307	-27.641	963.18813	-34.3	3.5	-80.6	51.7	45.36244	0.990	-85.6	60.5	53.1	11.1	7.0	95.48884	10-11
12	-6.907	-30.696	952.19809	-41.9	1.7	-80.8	53.7	42.40467	0.969	-82.2	57.2	58.8	2.8	-1.6	116.94733	11-12
13	-6.716	-27.794	955.52979	-71.8	3.1	-81.0	46.7	43.89681	0.986	-81.6	60.1	53.6	6.6	6.5	87.49733	12-13
14	-6.503	-24.764	972.09766	-81.9	4.5	-81.0	38.5	45.44637	0.982	-80.9	63.1	48.3	14.8	14.8	91.39463	13-14
15	-6.263	-21.538	1003.66480	-84.8	5.7	-80.9	32.5	46.67340	0.937	-80.0	66.2	43.0	23.3	23.2	97.37751	14-15
16	-5.985	-18.018	1052.90387	-86.2	6.9	-80.7	27.2	48.26527	0.877	-79.0	69.7	37.9	32.0	31.8	106.32578	15-16
17	-8.789	-17.567	1064.21284	-73.3	8.6	-81.6	32.8	49.37052	0.851	-84.2	70.4	37.1	33.6	33.2	85.99677	16-17
18	-12.213	-16.883	1093.86755	-60.4	10.9	-83.1	38.7	51.01980	0.807	-90.3	71.3	36.8	37.5	33.5	105.69989	17-18
19	-15.972	-15.948	1145.25113	-50.1	13.9	-85.1	43.9	53.21462	0.745	-96.4	72.6	37.1	43.2	32.6	117.12651	18-19
20	-20.273	-14.609	1225.64336	-42.2	18.0	-87.9	48.6	56.22948	0.659	-102.3	74.3	38.1	50.5	30.4	135.83847	19-20
21	-19.951	-19.175	1154.07883	-33.7	13.9	-85.1	54.1	53.62315	0.734	-101.1	70.0	43.3	44.1	20.2	130.23282	20-21
22	-19.762	-23.187	1109.22998	-23.1	9.9	-82.8	60.0	51.73289	0.788	-100.2	66.3	48.5	39.3	10.8	114.44456	21-22
23	-19.667	-26.864	1085.13749	-10.5	5.8	-80.8	66.4	50.33722	0.823	-99.4	62.9	53.8	36.4	1.7	104.89615	22-23
24	-19.646	-30.341	1078.49649	-3.1	1.7	-78.9	73.3	49.31875	0.843	-98.7	59.7	58.9	35.6	-7.0	99.17470	23-24
25	-15.912	-30.440	1020.14196	-4.1	1.7	-79.0	69.6	47.32972	0.914	-94.5	58.8	58.5	26.6	-3.8	113.13589	24-25
26	-12.559	-30.532	981.82644	-6.1	1.7	-79.5	65.2	45.79857	0.969	-90.2	58.1	58.3	17.8	-2.0	101.60821	25-26
27	-9.460	-30.621	959.86589	-11.4	1.7	-80.1	58.0	44.22555	0.992	-85.9	57.6	58.4	9.4	-1.3	93.88576	26-27
28	-6.907	-30.696	952.19809	-41.9	1.7	-80.8	53.7	42.40467	0.969	-82.2	57.2	58.8	2.8	-1.6	77.37280	27-28

JULY 31, 1964 13 HR 18 MIN 41 SEC 349 MS TAB NO 116 ATLAS PHOTO NO 116 POD SEQUENCE NO 238

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				427.450			940.85049	-6.180	-29.998	2676.306	2.203	-70.497	116.278			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.135	-19.515	1034.97427	-26.2	6.4	-81.2	56.4	47.81762	0.897	-93.5	68.6	40.1	31.0	27.8	0.	0-1
2	-12.344	-24.144	992.95163	-39.7	6.4	-81.3	50.3	47.18935	0.918	-90.2	64.3	47.5	23.3	15.3	142.07183	1-2
3	-9.325	-27.557	952.60532	-34.6	3.5	-80.6	51.5	44.86404	0.990	-85.6	60.6	53.1	11.2	7.1	136.64091	2-3
4	-9.166	-24.477	969.59306	-57.5	5.3	-81.1	44.4	45.86099	0.958	-85.2	63.6	47.8	17.4	15.5	92.21519	3-4
5	-8.997	-21.190	1001.99791	-67.8	7.0	-81.4	38.3	47.15342	0.913	-84.8	66.8	42.4	25.2	24.2	98.44579	4-5
6	-12.264	-20.705	1027.59511	-52.3	8.7	-82.2	44.2	48.60502	0.872	-90.3	67.6	42.1	29.8	24.3	100.00942	5-6
7	-15.827	-20.065	1072.25259	-41.4	10.8	-83.4	49.4	50.49893	0.814	-95.7	68.6	42.4	36.3	23.0	109.53224	6-7
8	-15.795	-23.718	1033.93530	-29.5	7.8	-81.9	55.4	48.90383	0.863	-95.3	65.1	47.8	30.8	13.8	106.44178	7-8
9	-15.807	-27.103	1013.58482	-14.0	4.8	-80.5	62.0	47.69828	0.896	-94.8	61.9	53.2	27.4	4.9	98.66851	8-9
10	-12.436	-27.352	974.74769	-20.1	4.1	-80.5	57.2	46.10589	0.950	-90.2	61.2	53.0	18.9	6.6	102.35827	9-10
11	-9.325	-27.557	952.60532	-34.6	3.5	-80.6	51.5	44.86404	0.990	-85.6	60.6	53.1	11.2	7.1	94.44015	10-11
12	-6.951	-30.579	941.54863	-39.4	1.7	-80.8	53.4	41.92912	0.969	-82.2	57.4	58.8	2.7	-1.5	115.66827	11-12
13	-6.762	-27.708	944.98651	-71.6	3.1	-80.9	46.6	43.42027	0.987	-81.6	60.2	53.6	6.7	6.6	86.53067	12-13
14	-6.551	-24.711	961.47281	-81.7	4.5	-81.0	38.6	44.94948	0.982	-80.9	63.1	48.3	14.8	14.8	90.40897	13-14
15	-6.313	-21.519	992.74741	-84.7	5.8	-80.9	32.5	46.16548	0.937	-80.0	66.3	43.0	23.3	23.2	96.33224	14-15
16	-6.039	-18.038	1041.43524	-86.1	6.9	-80.6	27.4	47.73933	0.877	-79.0	69.7	37.9	32.0	31.8	105.16097	15-16
17	-8.812	-17.591	1052.67450	-73.2	8.6	-81.6	32.9	48.83521	0.851	-84.2	70.3	37.1	33.6	33.1	85.06907	16-17
18	-12.200	-16.915	1081.99603	-60.4	10.9	-83.1	38.7	50.46621	0.808	-90.3	71.3	36.8	37.5	33.5	104.54969	17-18
19	-15.916	-15.993	1132.69373	-50.1	13.8	-85.1	43.9	52.63129	0.746	-96.3	72.5	37.1	43.2	32.6	115.79331	18-19
20	-20.164	-14.678	1211.85451	-42.2	17.9	-87.9	48.6	55.59695	0.661	-102.3	74.3	38.1	50.4	30.3	134.12861	19-20
21	-19.848	-19.187	1141.25159	-33.7	13.8	-85.1	54.0	53.02703	0.735	-101.1	70.0	43.3	44.0	20.3	128.68714	20-21
22	-19.662	-23.152	1096.89337	-23.2	9.8	-82.9	59.9	51.15734	0.788	-100.2	66.3	48.5	39.3	10.8	113.17483	21-22
23	-19.566	-26.787	1072.96143	-10.7	5.8	-80.9	66.2	49.77216	0.824	-99.4	62.9	53.8	36.3	1.8	103.74907	22-23
24	-19.543	-30.223	1066.20648	-2.9	1.8	-79.0	73.0	48.75658	0.844	-98.7	59.8	59.0	35.5	-6.8	98.06571	23-24
25	-15.855	-30.322	1008.69639	-3.9	1.7	-79.1	69.2	46.79868	0.915	-94.5	58.9	58.5	26.5	-3.7	111.76094	24-25
26	-12.540	-30.415	970.88290	-5.7	1.7	-79.5	64.9	45.28816	0.969	-90.2	58.2	58.3	17.8	-1.9	100.44402	25-26
27	-9.476	-30.504	949.17055	-10.7	1.7	-80.1	57.7	43.73213	0.992	-85.9	57.7	58.4	9.4	-1.2	92.83830	26-27
28	-6.951	-30.579	941.54863	-39.4	1.7	-80.8	53.4	41.92912	0.969	-82.2	57.4	58.8	2.7	-1.5	76.51293	27-28

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JULY 31, 1964 13 HR 18 MIN 46 SEC 469 MS TAB NO 117 ATLAS PHOTO NO 117 POD SEQUENCE NO 240

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
PHOTO DATA				422.330		930.21307		-6.216		-29.925		2665.668		2.206		-70.446		116.268	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.127	-19.533	1023.37312	-26.4	6.4	-81.2	56.2	47.28888	0.897	-93.5	68.6	40.1	30.9	27.8	0.	0-1			
2	-12.328	-24.097	982.01305	-39.8	6.4	-81.4	50.2	46.66950	0.918	-90.2	64.3	47.5	23.3	15.4	140.14519	1-2			
3	-9.342	-27.473	942.00668	-34.9	3.5	-80.7	51.3	44.36490	0.990	-85.6	60.7	53.2	11.3	7.1	135.15887	2-3			
4	-9.185	-24.426	958.90731	-57.5	5.3	-81.1	44.4	45.35551	0.958	-85.2	63.6	47.8	17.5	15.6	91.21247	3-4			
5	-9.018	-21.175	991.00606	-67.7	7.0	-81.4	38.3	46.63609	0.913	-84.8	66.8	42.4	25.2	24.2	97.37961	4-5			
6	-12.250	-20.696	1016.32373	-52.4	8.7	-82.2	44.1	48.07191	0.872	-90.3	67.6	42.1	29.8	24.3	98.91240	5-6			
7	-15.772	-20.064	1060.40453	-41.5	10.8	-83.4	49.3	49.94094	0.814	-95.7	68.6	42.4	36.2	23.0	108.29132	6-7			
8	-15.740	-23.675	1022.47442	-29.6	7.8	-81.9	55.2	48.36170	0.863	-95.3	65.2	47.8	30.8	13.9	105.27671	7-8			
9	-15.751	-27.023	1002.24259	-14.2	4.8	-80.6	61.8	47.16447	0.896	-94.8	62.0	53.2	27.4	5.0	97.59163	8-9			
10	-12.419	-27.270	963.90528	-20.3	4.1	-80.5	57.0	45.59306	0.950	-90.2	61.2	53.0	18.9	6.7	101.19072	9-10			
11	-9.342	-27.473	942.00668	-34.9	3.5	-80.7	51.3	44.36490	0.990	-85.6	60.7	53.2	11.3	7.1	93.38982	10-11			
12	-6.996	-30.463	930.88984	-36.9	1.7	-80.8	53.2	41.45340	0.969	-82.2	57.5	58.8	2.7	-1.4	14.38741	11-12			
13	-6.808	-27.623	934.42846	-71.5	3.2	-80.9	46.5	42.94288	0.987	-81.6	60.3	53.6	6.8	6.6	85.56296	12-13			
14	-6.599	-24.658	950.82829	-81.5	4.5	-81.0	38.6	44.45169	0.982	-80.9	63.2	48.3	14.9	14.9	89.42094	13-14			
15	-6.364	-21.501	981.80569	-84.5	5.8	-80.9	32.6	45.65645	0.937	-80.0	66.3	43.1	23.3	23.2	95.28354	14-15			
16	-6.093	-18.058	1029.93774	-86.0	7.0	-80.6	27.5	47.21209	0.877	-79.0	69.7	37.9	32.0	31.8	103.99194	15-16			
17	-8.836	-17.616	1041.10561	-73.2	8.6	-81.6	33.0	48.29850	0.852	-84.2	70.3	37.1	33.6	33.1	84.13876	16-17			
18	-12.186	-16.948	1070.09271	-60.4	10.9	-83.1	38.7	49.91114	0.808	-90.3	71.2	36.8	37.4	33.5	103.39637	17-18			
19	-15.860	-16.039	1120.10487	-50.2	13.8	-85.1	43.8	52.04651	0.747	-96.3	72.5	37.1	43.1	32.5	114.45774	18-19			
20	-20.056	-14.748	1198.03941	-42.3	17.8	-87.9	48.5	54.96322	0.662	-102.3	74.2	38.1	50.3	30.3	132.42035	19-20			
21	-19.745	-19.199	1128.40076	-33.8	13.8	-85.1	53.9	52.42983	0.737	-101.1	70.0	43.3	43.9	20.3	127.13830	20-21			
22	-19.701	-22.110	1001.52942	-21.4	9.8	-82.9	59.7	50.58094	0.789	-100.2	66.3	48.5	39.2	10.9	111.90125	21-22			
23	-19.465	-26.710	1060.77289	-10.8	5.8	-81.0	66.0	49.20657	0.825	-99.4	63.0	53.0	35.2	2.0	107.69999	22-23			
24	-19.441	-30.105	1053.91237	-2.8	1.8	-79.1	72.7	48.19425	0.845	-98.7	59.8	59.0	35.4	-6.7	96.95979	23-24			
25	-15.798	-30.205	997.24216	-3.6	1.7	-79.2	68.9	46.26725	0.915	-94.5	59.0	58.5	26.4	-3.5	110.38819	24-25			
26	-12.521	-30.299	959.92919	-5.3	1.7	-79.6	64.6	46.77729	0.969	-90.2	58.3	58.3	17.8	-1.7	99.27938	25-26			
27	-9.492	-30.387	938.46507	-10.0	1.7	-80.1	57.5	43.23847	0.992	-85.9	57.8	58.4	9.4	-1.1	91.79006	26-27			
28	-6.996	-30.463	930.88984	-36.9	1.7	-80.8	53.2	41.45340	0.969	-82.2	57.5	58.8	2.7	-1.4	75.65213	27-28			

JULY 31, 1964 13 HR 18 MIN 51 SEC 589 MS TAB NO 118 ATLAS PHOTO NO 118 POD SEQUENCE NO 242

TRAJECTORY DATA					SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ		
					417.210		919.56339		-6.252		-29.851		2655.019		2.209		-70.394		116.258		
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-11.118	-19.552	1011.75664	-26.5	6.4	-81.3	56.0	46.75922	0.897	-93.5	68.6	40.1	30.9	27.7	0.	0-1					
2	-12.313	-24.050	971.05367	-39.9	6.4	-81.4	50.1	46.14866	0.918	-90.2	64.4	47.6	23.4	15.4	138.23698	1-2					
3	-9.360	-27.390	931.39276	-35.1	3.5	-80.7	51.2	43.86503	0.989	-85.6	60.7	53.2	11.3	7.2	133.67311	2-3					
4	-9.205	-24.376	948.20149	-57.5	5.3	-81.1	44.3	44.84909	0.958	-85.2	63.7	47.8	17.5	15.6	90.20735	3-4					
5	-9.040	-21.160	979.98959	-67.7	7.0	-81.4	38.3	46.11760	0.913	-84.8	66.8	42.4	25.2	24.3	96.30996	4-5					
6	-12.235	-20.687	1005.02677	-52.4	8.6	-82.2	44.1	47.53759	0.872	-90.3	67.6	42.1	29.8	24.3	97.81285	5-6					
7	-15.717	-20.064	1048.53113	-41.5	10.8	-83.4	49.2	49.81861	0.815	-95.7	68.6	42.4	36.2	23.0	107.04831	6-7					
8	-15.686	-23.634	1010.99313	-29.7	7.8	-82.0	55.1	47.38177	0.863	-95.2	65.2	47.8	30.8	13.9	104.10785	7-8					
9	-15.696	-26.944	990.88552	-14.3	4.8	-80.6	61.5	46.62997	0.896	-94.8	62.1	53.2	27.3	5.1	96.51211	8-9					
10	-12.402	-27.189	953.04721	-20.6	4.1	-80.5	56.8	46.62997	0.896	-94.8	62.1	53.0	18.9	6.8	100.02222	9-10					
11	-9.360	-27.390	931.39276	-35.1	3.5	-80.7	51.2	43.86503	0.989	-85.6	60.7	53.2	11.3	7.2	92.33808	10-11					
12	-7.040	-30.346	920.22198	-34.4	1.8	-80.7	53.0	40.97750	0.969	-82.2	57.6	58.8	2.7	-1.3	113.10478	11-12					
13	-6.854	-27.539	923.85616	-71.3	3.2	-80.9	46.5	42.46465	0.987	-81.6	60.4	53.6	6.8	6.7	84.59419	12-13					
14	-6.648	-24.607	940.16488	-81.4	4.5	-81.0	38.6	43.95302	0.982	-80.9	63.2	48.3	14.9	14.9	88.43066	13-14					
15	-6.415	-21.484	970.84076	-84.4	5.8	-80.9	32.7	45.14635	0.937	-80.0	66.3	43.1	23.3	23.2	94.23161	14-15					
16	-6.147	-18.079	1018.41309	-85.9	7.0	-80.6	27.6	46.68361	0.877	-79.0	69.7	37.9	31.9	31.7	102.81905	15-16					
17	-8.860	-17.641	1029.50778	-73.2	8.6	-81.6	33.0	47.76045	0.852	-84.2	70.3	37.1	33.6	33.1	83.20605	16-17					
18	-12.172	-16.981	1058.15942	-60.4	10.9	-83.1	38.7	49.35467	0.809	-90.3	71.2	36.8	37.4	33.4	102.42401	17-18					
19	-15.805	-16.086	1107.48666	-50.2	13.7	-85.1	43.8	51.46034	0.748	-96.3	72.4	37.2	43.0	32.5	113.12009	18-19					
20	-19.948	-14.818	1184.20032	-42.3	17.7	-87.9	48.5	54.32838	0.664	-102.3	74.1	38.1	50.1	30.2	130.71369	19-20					
21	-19.642	-19.213	1115.52789	-33.9	13.7	-85.1	53.8	51.83160	0.738	-101.1	70.0	43.3	43.8	20.3	125.58677	20-21					
22	-19.460	-23.084	1072.16597	-23.4	9.8	-83.0	59.5	50.00374	0.790	-100.2	66.3	48.5	39.1	11.0	110.62424	21-22					
23	-19.364	-26.634	1048.57292	-11.0	5.8	-81.1	65.7	48.64046	0.826	-99.4	63.0	53.8	36.2	2.1	101.44688	22-23					
24	-15.741	-30.089	985.77953	-2.6	1.8	-79.3	72.4	47.63175	0.846	-98.7	59.9	59.0	35.3	-6.5	95.84503	23-24					
25	-12.503	-30.183	948.96552	-5.0	1.7	-79.6	64.3	44.26594	0.969	-90.2	58.4	58.3	17.8	-1.6	109.11479	24-25					
26	-9.508	-30.271	927.74963	-9.3	1.7	-80.2	57.2	42.74456	0.991	-85.9	57.9	58.5	9.4	-1.0	90.74088	26-27					
28	-7.040	-30.346	920.22198	-34.4	1.8	-80.7	53.0	40.97750	0.969	-82.2	57.6	58.8	2.7	-1.3	74.79057	27-28					

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TAB NO 119

ATLAS PHOTO NO 119

POD SEQUENCE NO 244

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				412.090	908.90073	-6.288	-29.777	2644.356	2.213	-70.341	116.248					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.109	-19.570	1000.12390	-26.7	6.4	-81.3	55.9	46.22876	0.897	-93.5	68.6	40.2	30.8	27.7	0.	0-1
2	-12.297	-24.004	960.07691	-40.0	6.4	-81.4	50.0	45.62700	0.918	-90.2	64.4	47.6	23.4	15.5	136.33055	1-
3	-9.378	-27.307	920.76446	-35.4	3.6	-80.7	51.0	43.36449	0.989	-85.6	60.8	53.2	11.4	7.3	132.18452	2-3
4	-9.225	-24.327	937.47886	-57.5	5.3	-81.1	44.3	44.34188	0.958	-85.2	63.7	47.8	17.6	15.7	89.20047	3-4
5	-9.061	-21.146	968.95461	-67.7	7.0	-81.4	38.4	45.59824	0.913	-84.8	66.9	42.4	25.2	24.3	95.23820	4-5
6	-12.221	-20.678	993.71069	-52.4	8.6	-82.2	44.0	47.00237	0.872	-90.3	67.6	42.1	29.8	24.3	96.71140	5-6
7	-15.663	-20.063	1036.63951	-41.6	10.7	-83.4	49.1	48.82173	0.815	-95.7	68.6	42.4	36.1	23.0	105.80415	6-7
8	-15.631	-23.592	999.49513	-29.8	7.8	-82.0	54.9	47.27472	0.863	-95.2	65.2	47.8	30.7	14.0	102.93693	7-8
9	-15.640	-26.864	979.51445	-14.5	4.8	-80.7	51.3	46.09481	0.891	-94.8	62.1	53.2	27.3	5.2	95.43073	8-9
10	-12.385	-27.107	942.17429	-20.8	4.1	-80.6	56.6	44.56521	0.950	-90.2	61.4	53.0	18.9	6.9	98.85275	9-10
11	-9.378	-27.307	920.76446	-35.4	3.6	-80.7	51.0	43.36449	0.989	-85.6	60.8	53.2	11.4	7.3	91.28486	10-11
12	-7.084	-30.230	909.54383	31.9	1.8	-80.7	52.8	40.50133	0.969	-82.2	57.7	58.8	2.7	-1.1	111.82050	11-12
13	-6.900	-27.455	913.27055	-71.1	3.2	-80.9	46.4	41.98574	0.987	-81.6	60.4	53.6	6.9	6.8	83.62444	12-13
14	-6.696	-24.555	929.48585	-81.2	4.5	-80.9	38.6	43.45363	0.982	-80.9	63.3	48.3	15.0	15.0	87.43873	13-14
15	-6.466	-21.467	959.85863	-84.3	5.8	-80.9	32.8	46.63546	0.937	-80.1	66.3	43.1	23.3	23.3	93.17775	14-15
16	-6.201	-18.101	1006.87068	-85.8	7.0	-80.6	27.8	46.15433	0.878	-79.0	69.7	37.9	31.9	31.7	101.64451	15-16
17	-8.883	-17.667	1017.89088	-73.1	8.6	-81.6	33.1	47.22152	0.852	-84.2	70.3	37.1	33.5	33.0	82.27170	16-17
18	-12.158	-17.015	1046.20659	-60.4	10.8	-83.1	38.7	48.79728	0.809	-90.3	71.2	36.8	37.4	33.4	101.08213	17-18
19	-15.748	-16.134	1094.85080	-50.2	13.7	-85.0	43.8	50.87335	0.749	-96.3	72.4	37.2	42.9	32.4	111.78180	18-19
20	-19.840	-14.889	1170.35133	-42.4	17.6	-87.8	48.4	55.69309	0.666	-102.3	74.0	38.2	50.0	30.1	129.01120	19-20
21	-19.539	-19.226	1102.64120	-34.0	13.6	-85.2	53.7	51.23274	0.739	-101.1	69.9	43.3	43.7	20.3	124.03668	20-21
22	-19.358	-23.050	1059.78033	-23.5	9.7	-83.0	59.4	48.42592	0.791	-100.2	66.4	48.5	39.0	11.0	109.34581	21-22
23	-19.263	-26.557	1036.36237	-11.1	5.8	-81.2	65.5	48.07387	0.826	-99.4	63.1	53.8	36.1	2.2	100.29291	22-23
24	-19.236	-29.870	1029.31004	2.4	1.9	-79.4	72.1	47.06897	0.847	-98.7	60.0	59.0	35.1	-6.4	94.73349	23-24
25	-15.683	-29.973	974.30670	3.2	1.8	-79.4	68.3	45.20313	0.916	-94.5	59.2	58.5	26.3	-3.3	107.64810	24-25
26	-12.484	-30.067	937.99044	4.6	1.8	-79.7	63.9	43.75407	0.969	-90.2	58.6	58.3	17.7	-1.5	96.94969	25-26
27	-9.524	-30.155	917.02299	8.6	1.8	-80.2	56.9	42.25029	0.991	-85.9	58.1	58.5	9.4	-0.9	89.69064	26-27
28	-7.084	-30.230	909.54383	31.9	1.8	-80.7	52.8	40.50133	0.969	-82.2	57.7	58.8	2.7	-1.1	73.92799	27-28

TAB NO 120

ATLAS PHOTO NO 120

POD SEQUENCE NO 246

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				406.970		898.22531		-6.325		-29.702		2633.681		2.216		-70.288		116.238	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.100	-19.588	988.47513	-26.8	6.4	-81.4	55.7	45.69724	0.897	-93.5	68.6	40.2	30.8	27.7	0.	0-1			
2	-12.281	-23.958	949.07677	-40.1	6.4	-81.4	49.9	45.10423	0.918	-90.2	64.4	47.6	23.4	15.5	134.44509	1-2			
3	-9.395	-27.224	910.11933	-35.6	3.6	-80.7	50.9	42.86316	0.989	-85.6	60.9	53.2	11.4	7.4	130.69145	2-3			
4	-9.244	-24.277	926.73403	-57.5	5.3	-81.1	44.2	43.83362	0.957	-85.2	63.8	47.8	17.6	15.7	88.19086	3-4			
5	-9.083	-21.133	957.89222	-67.6	7.0	-81.4	38.4	45.07760	0.913	-84.8	66.9	42.4	25.3	24.3	94.16255	4-5			
6	-12.206	-20.670	982.36566	-52.5	8.6	-82.2	44.0	46.46577	0.872	-90.3	67.6	42.1	29.8	24.3	95.60702	5-6			
7	-15.608	-20.064	1024.71849	-41.7	10.7	-83.4	49.0	48.26031	0.816	-95.7	68.6	42.4	36.1	23.0	104.55742	6-7			
8	-15.576	-23.552	987.97360	-30.0	7.8	-82.1	54.8	46.72973	0.864	-95.2	65.3	47.8	30.7	14.0	101.76161	7-8			
9	-15.585	-26.785	968.12607	-14.7	4.8	-80.8	61.1	45.55885	0.897	-94.8	62.2	53.2	27.3	5.3	94.34627	8-9			
10	-12.368	-27.026	931.28374	-21.0	4.1	-80.6	56.4	44.05010	0.950	-90.2	61.5	53.0	19.0	6.9	97.68193	9-10			
11	-9.395	-27.224	910.11933	-35.6	3.6	-80.7	50.9	42.86316	0.989	-85.6	60.9	53.2	11.4	7.4	90.22983	10-11			
12	-7.129	-30.114	898.85588	29.3	1.8	-80.7	52.5	40.02494	0.969	-82.2	57.8	58.8	2.6	-1.0	110.53428	11-12			
13	-6.947	-27.371	902.66945	-70.9	3.2	-80.9	46.3	41.50590	0.987	-81.6	60.5	53.6	7.0	6.9	82.65348	12-13			
14	-6.745	-24.504	918.78621	-81.0	4.5	-80.9	38.7	42.95328	0.981	-80.9	63.3	48.3	15.0	15.0	86.44430	13-14			
15	-6.517	-21.450	948.85091	-84.2	5.8	-80.8	32.9	44.12339	0.937	-80.1	66.4	43.1	23.3	23.3	92.12026	14-15			
16	-6.256	-18.123	995.29784	-85.7	7.0	-80.6	27.9	45.62368	0.878	-79.0	69.6	37.9	31.9	31.7	100.46546	15-16			
17	-8.907	-17.693	1006.24134	-73.1	8.6	-81.6	33.2	46.68108	0.852	-84.2	70.2	37.1	33.5	33.0	81.33466	16-17			
18	-12.145	-17.050	1034.21939	-60.4	10.8	-83.1	38.7	48.23830	0.810	-90.3	71.1	36.8	37.3	33.3	99.92050	17-18			
19	-15.692	-16.182	1082.18021	-50.3	13.6	-85.0	43.8	50.28475	0.749	-96.3	72.3	37.2	42.9	32.4	110.44049	18-19			
20	-19.731	-14.960	1156.47151	-42.4	17.5	-87.8	48.3	53.05637	0.668	-102.3	73.9	38.2	49.9	30.0	127.30917	19-20			
21	-19.435	-19.241	1089.72733	-34.0	13.6	-85.2	53.6	50.63262	0.740	-101.1	69.9	43.3	43.6	20.3	122.48255	20-21			
22	-19.257	-23.017	1047.37317	-23.6	9.7	-83.1	59.2	48.84712	0.792	-100.2	66.4	48.5	38.9	11.1	108.06312	21-22			
23	-19.162	-26.482	1024.13724	-11.3	5.8	-81.2	65.2	47.50662	0.827	-99.4	63.1	53.8	36.0	2.3	99.13578	22-23			
24	-19.133	-29.754	1016.99937	2.2	1.9	-79.5	71.8	46.50592	0.848	-98.7	60.1	59.0	35.0	-6.2	93.62072	23-24			
25	-15.626	-29.857	962.82356	2.9	1.8	-79.5	68.0	46.70737	0.911	-94.5	59.3	58.5	26.2	-3.1	106.28054	24-25			
26	-12.465	-29.951	927.00404	4.3	1.8	-79.7	63.6	43.24166	0.970	-90.2	58.7	58.3	17.7	-1.4	95.78402	25-26			
27	-9.540	-30.040	906.28537	7.9	1.8	-80.2	56.6	41.75568	0.991	-85.9	58.2	58.5	9.4	-0.8	88.63925	26-27			
28	-7.129	-30.114	898.85588	29.3	1.8	-80.7	52.5	40.02494	0.969	-82.2	57.8	58.8	2.6	-1.0	73.06466	27-28			

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TAB NO 121

ATLAS PHOTO NO 121

POD SEQUENCE NO 248

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				401.850		887.53696	-6.362	-29.627	2622.992	2.220	-70.235	116.227				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.092	-19.607	976.81023	-27.0	6.4	-81.4	55.5	45.16475	0.897	-93.5	68.5	40.2	30.7	27.6	0.	0-
2	-12.266	-23.912	938.05506	-40.2	6.4	-81.4	49.8	44.58043	0.918	-90.2	64.5	47.6	23.4	15.6	132.57420	1-2
3	-9.413	-27.142	899.45799	-35.9	3.6	-80.7	50.8	42.36105	0.989	-85.6	61.0	53.2	11.5	7.4	129.19445	2-3
4	-9.264	-24.229	915.96862	-57.6	5.3	-81.1	44.2	43.32439	0.957	-85.2	63.8	47.8	17.7	15.8	87.17880	3-4
5	-9.104	-21.120	946.80524	-67.6	7.0	-81.4	38.4	44.55581	0.913	-84.8	66.9	42.4	25.3	24.3	93.08359	4-5
6	-12.191	-20.662	970.99485	-52.5	8.6	-82.2	44.0	45.92796	0.872	-90.2	67.6	42.1	29.8	24.3	94.49996	5-6
7	-15.552	-20.065	1012.77170	-41.7	10.7	-83.5	49.0	47.69767	0.816	-95.7	68.6	42.5	36.0	23.0	103.30846	6-7
8	-15.521	-23.511	976.43062	-30.1	7.8	-82.1	54.6	46.18373	0.864	-95.2	65.3	47.8	30.7	14.1	100.58265	7-8
9	-15.529	-26.707	956.72128	-14.9	4.8	-80.8	60.9	45.02211	0.897	-94.8	62.3	53.2	27.2	5.4	93.25911	8-9
10	-12.351	-26.945	920.37628	-21.3	4.1	-80.6	56.2	43.53419	0.950	-90.2	61.6	53.0	19.0	7.0	96.50990	9-10
11	-9.413	-27.142	899.45799	-35.9	3.6	-80.7	50.8	42.36105	0.989	-85.6	61.0	53.2	11.5	7.4	89.17309	10-11
12	-7.173	-29.999	888.15773	26.7	1.8	-80.7	52.3	39.54827	0.968	-82.2	58.0	58.8	2.6	-0.9	109.24608	11-12
13	-6.993	-27.287	892.05339	-70.8	3.2	-80.9	46.3	41.02519	0.988	-81.6	60.6	53.6	7.1	7.0	81.68137	12-13
14	-6.793	-24.453	908.06741	-80.9	4.6	-80.9	38.7	42.45204	0.981	-80.9	63.4	48.4	15.1	15.1	85.44764	13-14
15	-6.568	-21.434	937.82027	-84.1	5.8	-80.8	33.0	41.01027	0.937	-80.1	66.4	43.1	23.3	23.3	91.05969	14-15
16	-8.310	-18.146	983.69875	-85.6	7.0	-80.5	28.0	43.09184	0.878	-79.0	69.6	37.9	31.8	31.7	99.28290	15-16
17	-8.930	-17.721	994.56364	-73.0	8.6	-81.6	33.3	46.13934	0.853	-84.2	70.2	37.1	33.5	33.0	80.39517	16-17
18	-12.130	-17.085	1022.20272	-60.4	10.8	-83.1	38.7	47.67793	0.810	-90.3	71.1	36.8	37.3	33.3	98.75587	17-18
19	-15.635	-16.231	1069.48058	-50.3	13.6	-85.0	43.7	49.69479	0.750	-96.3	72.3	37.2	42.8	32.3	109.09721	18-19
20	-19.622	-15.032	1142.56786	-42.5	17.4	-87.8	48.3	52.41856	0.669	-102.3	73.9	38.2	49.7	30.0	125.60854	19-20
21	-19.332	-19.256	1076.79063	-34.1	13.5	-85.2	53.5	50.03144	0.741	-101.1	69.9	43.3	43.5	20.3	120.92624	20-21
22	-19.156	-22.985	1034.94717	-23.7	9.6	-83.1	59.0	46.26745	0.732	-100.2	64.4	48.5	38.9	11.1	104.77700	21-22
23	-19.061	-26.407	1011.89860	-11.4	5.8	-81.3	65.0	46.93875	0.828	-99.4	63.2	53.8	35.9	2.4	97.97603	22-23
24	-19.031	-29.638	1004.68201	2.0	2.0	-79.6	71.4	45.94258	0.849	-98.7	60.2	59.0	34.9	-6.1	92.50681	23-24
25	-15.569	-29.742	951.32993	2.7	1.9	-79.6	67.7	44.13713	0.917	-94.5	59.4	58.5	26.2	-3.0	104.91437	24-25
26	-12.446	-29.836	916.00601	3.9	1.8	-79.8	63.3	42.72871	0.970	-90.2	58.8	58.3	17.7	-1.3	94.61792	25-26
27	-9.556	-29.925	895.53648	7.2	1.8	-80.2	56.4	41.26070	0.992	-85.9	58.3	58.5	9.4	-0.7	87.58680	26-27
28	-7.173	-29.999	888.15773	26.7	1.8	-80.7	52.3	39.54827	0.968	-82.2	58.0	58.8	2.6	-0.9	72.20020	27-28

TAB NO 122

ATLAS PHOTO NO 122

POD SEQUENCE NO 250

JULY 31,1964 13 HR 19 MIN 12 SEC 69 MS				TAB NO 122		ATLAS PHOTO NO 122		POD SEQUENCE NO 250								
TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				396.731		876.83582	-6.399	-29.551	2612.291	2.223	-70.181	116.217				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.083	-19.625	965.12919	-27.1	6.4	-81.5	55.4	44.63146	0.897	-93.5	68.5	40.3	30.7	27.6	0.	0-1
2	-12.250	-23.867	927.01601	-40.4	6.4	-81.5	49.6	44.05580	0.918	-90.2	64.5	47.6	23.4	15.6	130.70462	1-2
3	-9.431	-27.059	888.78216	-36.1	3.6	-80.7	50.6	41.85827	0.989	-85.6	61.1	53.2	11.6	7.5	127.69472	2-3
4	-9.283	-24.180	905.18643	-57.6	5.3	-81.1	44.1	42.81436	0.957	-85.2	63.9	47.8	17.7	15.8	86.16498	3-4
5	-9.125	-21.107	935.69991	-67.5	7.0	-81.4	38.4	44.03315	0.912	-84.8	66.9	42.4	25.3	24.3	92.00258	4-5
6	-12.177	-20.655	959.60513	-52.5	8.6	-82.2	43.9	45.38925	0.872	-90.2	67.6	42.2	29.8	24.3	93.39111	5-6
7	-15.497	-20.066	1000.80698	-41.8	10.6	-83.5	48.9	47.13419	0.816	-95.7	68.6	42.5	36.0	23.0	102.05825	6-7
8	-15.466	-23.471	964.87106	-30.2	7.7	-82.1	54.5	45.63693	0.864	-95.2	65.3	47.8	30.6	14.1	99.40172	7-8
9	-15.473	-26.628	945.30246	-15.1	4.8	-80.9	60.6	44.48471	0.898	-94.8	62.3	53.2	27.2	5.5	92.17010	8-9
10	-12.334	-26.865	909.45392	-21.5	4.1	-80.7	56.0	43.01758	0.950	-90.2	61.6	53.0	19.0	7.1	95.33691	9-10
11	-9.431	-27.059	888.78216	-36.1	3.6	-80.7	50.6	41.85827	0.989	-85.6	61.1	53.2	11.6	7.5	88.11498	10-11
12	-7.218	-29.883	877.44912	24.2	1.8	-80.7	52.1	39.07131	0.968	-82.2	58.1	58.8	2.6	-0.8	107.95625	11-12
13	-7.039	-27.204	881.42393	-70.6	3.2	-80.8	46.2	40.54379	0.988	-81.6	60.7	53.6	7.2	7.0	80.70825	12-13
14	-6.842	-24.402	897.33303	-80.7	4.6	-80.9	38.7	41.95007	0.981	-80.9	63.5	48.4	15.1	15.1	84.44930	13-14
15	-6.619	-21.419	926.77258	-83.9	5.9	-80.8	33.1	43.09636	0.937	-80.1	66.4	43.1	23.3	23.3	89.99725	14-15
16	-6.364	-18.169	972.08233	-85.5	7.1	-80.5	28.2	44.55922	0.878	-79.0	69.6	37.9	31.8	31.6	98.09882	15-16
17	-8.954	-17.748	982.86726	-73.0	8.6	-81.6	33.3	45.59674	0.853	-84.2	70.2	37.1	33.5	32.9	79.45405	16-17
18	-12.116	-17.121	1010.16704	-60.4	10.8	-83.1	38.8	47.11668	0.811	-90.3	71.1	36.8	37.2	33.3	107.75326	17-18
19	-15.579	-16.280	1056.76404	-50.3	13.5	-85.0	43.7	49.10404	0.751	-96.3	73.2	37.2	42.7	32.3	107.75326	18-19
20	-19.513	-15.104	1128.65521	-42.5	17.2	-87.7	48.2	51.78033	0.671	-102.3	73.8	38.2	49.6	29.9	123.91238	19-20
21	-19.228	-19.271	1063.84064	-34.2	13.4	-85.2	53.4	49.42965	0.742	-101.1	69.9	43.3	43.5	20.3	119.37165	20-21
22	-19.054	-22.953	1022.50815	-23.9	9.6	-83.2	58.9	47.68717	0.794	-100.2	64.4	48.6	38.8	11.2	105.48984	21-22
23	-18.960	-26.332	999.64942	-11.6	5.8	-81.4	64.8	46.37040	0.829	-99.4	63.2	53.8	35.8	2.5	96.81472	22-23
24	-18.928	-29.522	992.35840	1.9	2.0	-79.7	71.1	45.37895	0.850	-98.7	60.3	59.0	34.8	-5.9	91.39211	23-24
25	-15.511	-29.626	939.82595	2.4	1.9	-79.6	67.3	43.60340	0.918	-94.5	59.5	58.5	26.1	-2.9	103.54993	24-25
26	-12.427	-29.721	904.99638	3.6	1.8	-79.8	63.0	42.21522	0.970	-90.2	58.9	58.3	17.7	-1.2	93.45138	25-26
27	-9.572	-29.809	884.77618	6.6	1.8	-80.2	56.1	40.76534	0.992	-85.9	58.4	58.5	9.4	-0.6	86.53331	26-27
28	-7.218	-29.883	877.44912	24.2	1.8	-80.7	52.1	39.07131	0.968	-82.2	58.1	58.8	2.6	-0.8	71.33480	27-28

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JULY 31, 1964 13 HR 19 MIN 17 SEC 189 MS TAB NO 123 ATLAS PHOTO NO 123 POD SEQUENCE NO 252

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				391.611			866.12155	-6.436	-29.474	2601.577	2.227	-70.127	116.206			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.074	-19.643	953.43172	-27.3	6.4	-81.5	55.2	44.09746	0.897	-93.5	68.5	40.3	30.6	27.5	0.	0-1
2	-12.234	-23.821	915.96217	-40.5	6.4	-81.5	49.5	43.53048	0.918	-90.2	64.6	47.6	23.4	15.6	128.82586	1-2
3	-9.448	-26.976	878.09273	-36.4	3.6	-80.7	50.5	41.35485	0.988	-85.6	61.2	53.2	11.6	7.6	126.14982	2-3
4	-9.302	-24.131	894.38982	-57.6	5.3	-81.1	44.1	42.30365	0.957	-89.2	63.9	47.8	17.8	15.9	85.14980	3-4
5	-9.147	-21.094	924.58042	-67.5	7.0	-81.4	38.5	43.50983	0.912	-94.8	66.9	42.4	25.3	24.3	90.92038	4-5
6	-12.162	-20.647	948.20100	-52.6	8.6	-82.3	43.9	44.84986	0.872	-90.2	67.6	42.2	29.8	24.3	92.28088	5-6
7	-15.442	-20.067	988.82942	-41.9	10.6	-83.5	48.8	46.57010	0.817	-95.7	68.6	42.5	35.9	23.0	100.80763	6-7
8	-15.411	-23.430	953.29777	-30.3	7.7	-82.2	54.4	45.08949	0.865	-95.2	65.4	47.8	30.6	14.1	98.21996	7-8
9	-15.417	-26.550	933.87067	-15.3	4.8	-80.9	50.4	43.54670	0.898	-94.8	62.4	53.2	27.1	5.6	91.07980	8-9
10	-12.316	-26.783	898.51761	-21.7	4.1	-80.7	55.8	42.50031	0.950	-90.2	61.7	53.0	19.0	7.2	94.16319	9-10
11	-9.448	-26.976	878.09273	-36.4	3.6	-80.7	50.5	41.35485	0.988	-85.6	61.2	53.2	11.6	7.6	87.05543	10-11
12	-7.262	-29.767	866.72963	21.6	1.8	-80.7	51.9	38.59400	0.968	-82.2	58.2	58.9	2.6	-0.7	106.66497	11-12
13	-7.085	-27.120	870.78194	-70.4	3.2	-80.8	46.1	40.06182	0.988	-81.6	60.8	53.7	7.3	7.1	79.73416	12-13
14	-6.890	-24.351	886.58534	-80.6	4.6	-80.9	38.7	41.44748	0.981	-80.9	63.5	48.4	15.1	15.1	83.44973	13-14
15	-6.670	-21.402	915.71187	-83.8	5.9	-80.8	33.2	42.58184	0.937	-80.1	66.4	43.1	23.4	23.3	88.93376	14-15
16	-6.418	-18.192	960.45478	-85.4	7.1	-80.5	28.3	44.02607	0.879	-79.0	69.6	37.9	31.8	31.6	96.91465	15-16
17	-8.977	-17.775	971.15862	-72.9	8.6	-81.6	33.4	45.05357	0.853	-84.2	70.2	37.1	33.4	32.9	78.51185	16-17
18	-12.102	-17.156	998.11935	-60.4	10.8	-83.1	38.8	46.55486	0.811	-90.3	71.0	36.8	37.2	33.2	96.42223	17-18
19	-15.522	-16.328	1044.03838	-50.4	13.5	-85.0	43.7	48.51286	0.752	-96.3	72.2	37.2	42.6	32.2	106.40980	18-19
20	-19.404	-15.175	1114.74294	-42.6	17.1	-87.7	48.2	51.14212	0.673	-102.2	73.7	38.2	49.5	29.8	117.82116	19-20
21	-19.124	-19.285	1050.88321	-34.3	13.3	-85.2	53.2	48.82751	0.744	-101.1	69.8	43.3	43.4	20.3	104.20279	20-21
22	-18.952	-22.920	1010.05935	-24.0	9.6	-83.2	58.7	47.10643	0.795	-100.2	66.4	48.6	38.7	2.6	95.65252	21-22
23	-18.858	-26.256	987.39090	-11.7	5.8	-81.5	64.5	45.80161	0.830	-99.4	63.3	53.8	35.7	2.6	95.65252	22-23
24	-18.826	-29.405	980.02786	1.7	2.1	-79.8	70.8	46.81500	0.851	-98.7	60.4	59.0	34.7	-5.8	90.27677	23-24
25	-15.454	-29.510	928.31109	2.2	1.9	-79.7	67.0	43.06917	0.918	-94.5	59.6	58.5	26.1	-2.8	102.18703	24-25
26	-12.408	-29.605	893.97465	3.2	1.9	-79.9	62.7	41.70116	0.970	-90.2	59.0	58.4	17.6	-1.1	92.28432	25-26
27	-9.587	-29.693	874.00399	5.9	1.8	-80.3	55.9	40.26955	0.992	-85.9	58.5	58.5	9.4	-0.4	85.47848	26-27
28	-7.262	-29.767	866.72963	21.6	1.8	-80.7	51.9	38.59400	0.968	-82.2	58.2	58.9	2.6	-0.7	70.46857	27-28

JULY 31, 1964 13 HR 19 MIN 22 SEC 309 MS TAB NO 124 ATLAS PHOTO NO 124 POD SEQUENCE NO 254

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				386.491		855.39410	-6.474	-29.396	2590.849	2.230	-70.073	116.195				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.066	-19.661	941.71774	-27.4	6.4	-81.6	55.0	43.56268	0.897	-93.5	68.5	40.3	30.6	27.5	0.	0-1
2	-12.218	-23.776	904.89183	-40.6	6.4	-81.5	49.4	43.00436	0.918	-90.2	64.6	47.6	23.4	15.7	126.94371	1-2
3	-9.466	-26.893	867.38892	-36.6	3.6	-80.7	50.3	40.85075	0.988	-85.6	61.3	53.2	11.7	7.7	124.68847	2-3
4	-9.322	-24.082	883.57721	-57.6	5.4	-81.1	44.1	41.79219	0.956	-85.2	64.0	47.8	17.8	15.9	84.13301	3-4
5	-9.168	-21.081	913.44419	-67.5	7.0	-81.4	38.5	42.98572	0.912	-84.8	66.9	42.4	25.3	24.3	89.83654	4-5
6	-12.147	-20.640	936.77969	-52.6	8.6	-82.3	43.9	44.30965	0.872	-90.2	67.6	42.2	29.7	24.3	91.16890	5-6
7	-15.386	-20.067	976.83595	-41.9	10.6	-83.5	48.7	46.00527	0.817	-95.7	68.6	42.5	35.9	23.0	99.55615	6-7
8	-15.355	-23.390	941.70882	-30.4	7.7	-82.2	54.2	44.54132	0.865	-95.2	65.4	47.9	30.6	14.2	97.03673	7-8
9	-15.360	-26.471	922.42502	-15.5	4.9	-81.0	60.2	43.40804	0.898	-94.8	62.5	53.2	27.1	5.6	89.98787	8-9
10	-12.299	-26.702	887.56649	-22.0	4.2	-80.8	55.6	41.98233	0.950	-90.2	61.8	53.0	19.0	7.2	92.98861	9-10
11	-9.466	-26.893	867.38892	-36.6	3.6	-80.7	50.3	40.85075	0.988	-85.6	61.3	53.2	11.7	7.7	85.99451	10-11
12	-7.306	-29.650	855.99914	18.9	1.8	-80.7	51.7	38.11637	0.968	-82.2	58.3	58.9	2.6	-0.6	105.37200	11-12
13	-7.132	-27.035	860.12665	-70.3	3.2	-80.8	46.1	39.57919	0.988	-81.6	60.9	53.7	7.4	7.2	78.75903	12-13
14	-6.939	-24.386	875.82282	-80.4	4.6	-80.8	38.8	40.94421	0.980	-80.9	63.6	48.4	15.2	15.2	82.44868	13-14
15	-6.722	-21.386	904.63570	-83.7	5.9	-80.7	33.3	42.06660	0.937	-80.1	66.4	43.1	23.4	23.3	87.86875	14-15
16	-6.473	-18.214	948.81251	-85.3	7.1	-80.5	28.4	43.49225	0.879	-79.0	69.6	37.9	31.7	31.6	95.72962	15-16
17	-9.001	-17.802	959.43393	-72.9	8.6	-81.5	33.5	44.50964	0.854	-84.2	70.1	37.1	33.4	32.9	77.56845	16-17
18	-12.088	-17.191	986.05557	-60.4	10.7	-83.1	38.8	45.99229	0.812	-90.3	71.0	36.8	37.1	33.2	95.25340	17-18
19	-15.465	-16.377	1031.29910	-50.4	13.4	-85.0	43.7	47.92105	0.753	-96.3	72.1	37.2	42.5	32.1	105.06625	18-19
20	-19.295	-15.246	1100.82552	-42.6	17.0	-87.7	48.1	50.50367	0.675	-102.2	73.6	38.2	49.4	29.8	120.53605	19-20
21	-19.020	-19.299	1037.91486	-34.4	13.3	-85.3	53.1	48.22486	0.745	-101.1	69.8	43.3	43.3	20.3	116.27339	20-21
22	-18.851	-22.887	997.59872	-24.1	9.5	-83.3	58.5	46.52515	0.796	-100.2	66.4	48.6	38.6	11.3	102.91512	21-22
23	-18.757	-26.181	975.12205	-11.9	5.8	-81.6	64.3	45.23234	0.831	-99.4	63.3	53.8	35.7	2.7	94.48906	22-23
24	-18.723	-29.289	967.69039	1.5	2.1	-79.9	70.5	42.52073	0.853	-98.7	60.4	59.0	34.6	-5.6	89.16068	23-24
25	-15.396	-29.394	916.78532	2.0	2.0	-79.8	66.7	42.53443	0.919	-94.5	59.7	58.5	26.0	-2.6	100.82558	24-25
26	-12.389	-29.489	882.94077	2.8	1.9	-80.0	62.4	41.18653	0.970	-90.2	59.1	58.4	17.6	-0.9	91.11683	25-26
27	-9.603	-29.577	863.21987	5.2	1.8	-80.3	55.6	39.77334	0.992	-85.9	58.6	58.5	9.4	-0.3	84.42261	26-27
28	-7.306	-29.650	855.99914	18.9	1.8	-80.7	51.7	38.11637	0.968	-82.2	58.3	58.9	2.6	-0.6	69.60121	27-28

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JULY 31, 1964 13 HR 19 MIN 27 SEC 429 MS

TAB NO 125

ATLAS PHOTO NO 125

POD SEQUENCE NO 256

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
PHOTO DATA				381.371				844.65356	-6.512	-29.318	2580.109	2.234	-70.018	116.184		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.057	-19.679	929.98734	-27.5	6.4	-81.6	54.9	43.02707	0.897	-93.6	68.5	40.3	30.5	27.4	0.	0-1
2	-12.201	-23.730	893.80354	-40.7	6.4	-81.5	49.3	42.47740	0.917	-90.2	64.7	47.6	23.4	15.7	125.06354	1-2
3	-9.483	-26.810	856.67014	-36.9	3.6	-80.7	50.2	40.34594	0.988	-85.6	61.3	53.2	11.7	7.8	123.18117	2-3
4	-9.341	-24.032	872.74722	-57.7	5.4	-81.1	44.0	41.27990	0.956	-85.2	64.0	47.8	17.8	15.9	83.11425	3-4
5	-9.189	-21.068	902.28893	-67.4	7.0	-81.3	38.5	42.46071	0.912	-84.8	66.9	42.4	25.3	24.3	88.75053	4-5
6	-12.132	-20.632	925.33875	-52.7	8.6	-82.3	43.8	43.76852	0.872	-90.2	67.7	42.2	29.7	24.3	90.05503	5-6
7	-15.330	-20.068	964.82384	-42.0	10.5	-83.5	48.6	45.43955	0.818	-95.7	68.6	42.5	35.9	23.0	98.30353	6-7
8	-15.300	-23.349	930.10272	-30.5	7.7	-82.3	54.1	43.99233	0.865	-95.2	65.4	47.9	30.6	14.2	95.85141	7-8
9	-15.304	-26.392	910.96481	-15.7	4.9	-81.1	60.0	42.86870	0.898	-94.8	62.5	53.2	27.1	5.7	88.89401	8-9
10	-12.281	-26.621	876.59997	-22.2	4.2	-80.8	55.4	41.46362	0.950	-90.2	61.9	53.0	19.0	7.3	91.81306	9-10
11	-9.483	-26.810	856.67014	-36.9	3.6	-80.7	50.2	40.34594	0.988	-85.6	61.3	53.2	11.7	7.8	84.93211	10-11
12	-7.351	-29.534	845.25787	16.4	1.8	-80.7	51.5	37.63840	0.969	-82.2	58.4	58.9	2.6	-0.5	104.07732	11-12
13	-7.178	-26.951	849.45474	-70.1	3.3	-80.8	46.0	39.09584	0.988	-81.6	61.0	53.7	7.4	7.3	77.78283	12-13
14	-6.987	-24.248	865.04412	-80.3	4.6	-80.8	38.8	40.44017	0.980	-80.9	63.6	48.4	15.2	15.2	81.44591	13-14
15	-6.773	-21.370	893.54178	-83.6	5.9	-80.7	33.4	41.55055	0.937	-80.1	66.5	43.1	23.4	23.3	86.80178	14-15
16	-6.527	-18.237	937.15205	-85.2	7.1	-80.5	28.6	42.95760	0.879	-79.0	69.5	37.9	31.7	31.6	94.54292	15-16
17	-9.024	-17.829	947.68967	-72.8	8.7	-81.5	33.6	43.96482	0.854	-84.2	70.1	37.1	33.4	32.8	76.62329	16-17
18	-12.073	-17.227	973.97186	-60.4	10.7	-83.0	38.8	45.42879	0.812	-90.3	71.0	36.8	37.1	33.1	94.08274	17-18
19	-15.408	-16.425	1018.54190	-50.4	13.3	-85.0	43.6	47.32840	0.754	-96.3	72.1	37.2	42.5	32.1	103.72216	18-19
20	-19.187	-15.316	1030.25775	-42.7	16.9	-87.7	48.1	49.86474	0.677	-102.2	73.6	38.2	49.2	29.7	118.85410	19-20
21	-18.916	-19.313	1024.93233	-34.4	13.2	-85.2	53.0	47.62156	0.746	-101.1	69.8	43.3	43.2	20.3	114.72688	20-21
22	-18.749	-22.854	985.12435	-24.2	9.5	-83.3	58.3	45.94322	0.797	-100.2	66.4	48.6	38.5	11.4	101.62613	21-22
23	-18.655	-26.105	962.84209	-12.0	5.8	-81.6	64.0	44.66256	0.832	-99.4	63.4	53.8	35.6	2.6	73.22496	22-23
24	-18.620	-29.172	955.34617	1.3	2.1	-80.0	70.2	43.68616	0.854	-98.7	60.5	59.0	34.5	-5.5	88.04368	23-24
25	-15.338	-29.278	905.24879	1.7	2.0	-79.9	66.4	41.99919	0.919	-94.5	59.8	58.5	25.9	-2.5	99.46564	24-25
26	-12.370	-29.373	871.89489	2.5	1.9	-80.0	62.1	40.67134	0.970	-90.2	59.2	58.4	17.6	-0.8	89.94881	25-26
27	-9.619	-29.461	852.42394	4.6	1.9	-80.3	55.3	39.27670	0.992	-85.9	58.8	58.5	9.5	-0.2	83.36568	26-27
28	-7.351	-29.534	845.25787	16.4	1.8	-80.7	51.5	37.63840	0.969	-82.2	58.4	58.9	2.6	-0.5	68.73292	27-28

JULY 31, 1964 13 HR 19 MIN 32 SEC 548 MS

TAB NO 126

ATLAS PHOTO NO 126

POD SEQUENCE NO 258

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				376.251		833.89972	-6.551	-29.240	2569.355	2.237	-69.962	116.173				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCU	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.048	-19.697	918.24025	-27.7	6.3	-81.6	54.7	42.49057	0.897	-93.6	68.5	40.4	30.5	27.4	0.	0-1
2	-12.184	-23.683	882.70130	-40.8	6.4	-81.6	49.2	41.94978	0.917	-90.2	64.7	47.6	23.5	15.8	123.13697	1-2
3	-9.500	-26.726	845.93745	-37.1	3.6	-80.7	50.0	39.84048	0.988	-85.6	61.4	53.2	11.8	7.8	121.67218	2-3
4	-9.360	-23.982	861.90722	-57.7	5.4	-81.1	43.9	40.76714	0.956	-85.2	64.1	47.8	17.9	16.0	82.09545	3-4
5	-9.210	-21.053	891.12945	-67.4	7.0	-81.3	38.5	41.93551	0.912	-84.8	67.0	42.4	25.3	24.3	87.66584	4-5
6	-12.115	-20.623	913.88989	-52.7	8.6	-82.3	43.8	43.22702	0.872	-90.2	67.7	42.2	29.7	24.3	88.93966	5-6
7	-15.274	-20.067	952.80140	-42.1	10.5	-83.6	48.5	44.87335	0.818	-95.7	68.6	42.5	35.8	23.0	97.04911	6-7
8	-15.243	-23.307	918.47958	-30.7	7.7	-82.3	53.9	43.44253	0.865	-95.2	65.5	47.9	30.5	14.3	94.66732	7-8
9	-15.247	-26.311	899.48328	-15.9	4.9	-81.1	59.7	42.32835	0.899	-94.8	62.6	53.2	27.0	5.8	87.79942	8-9
10	-12.263	-26.538	865.61550	-22.4	4.2	-80.8	55.2	40.94408	0.950	-90.2	61.9	53.0	19.0	7.4	90.63456	9-10
11	-9.500	-26.726	845.93745	-37.1	3.6	-80.7	50.0	39.84048	0.988	-85.6	61.4	53.2	11.8	7.8	83.86727	10-11
12	-7.395	-29.416	834.50397	13.7	1.8	-80.6	51.3	37.15991	0.969	-82.2	58.6	58.9	2.7	-0.4	102.78113	11-12
13	-7.224	-26.865	838.77836	-70.0	3.3	-80.8	45.9	38.61222	0.989	-81.6	61.1	53.7	7.5	7.4	76.80595	12-13
14	-7.035	-24.196	854.25945	-80.1	4.6	-80.8	38.8	39.93585	0.980	-80.9	63.7	48.4	15.3	15.3	80.44327	13-14
15	-6.823	-21.352	882.44775	-83.5	5.9	-80.7	33.5	41.03448	0.936	-80.1	66.5	43.1	23.4	23.4	85.73647	14-15
16	-6.580	-18.258	925.50048	-85.1	7.2	-80.4	28.7	42.42335	0.879	-79.0	69.5	37.9	31.7	31.6	93.36075	15-16
17	-9.047	-17.855	935.95020	-72.8	8.7	-81.5	33.6	43.42021	0.854	-84.2	70.1	37.2	33.3	32.8	75.67803	16-17
18	-12.058	-17.261	961.88978	-60.4	10.7	-83.0	38.8	44.86537	0.812	-90.3	70.9	36.8	37.1	33.1	92.91149	17-18
19	-15.350	-16.472	1005.78564	-50.5	13.3	-85.0	43.6	46.73580	0.755	-96.3	72.0	37.2	42.4	32.0	102.37808	18-19
20	-19.077	-15.384	1072.97569	-42.7	16.8	-87.6	48.0	49.22607	0.678	-102.2	73.5	38.2	49.1	29.6	117.17561	19-20
21	-18.811	-19.325	1011.93989	-34.5	13.1	-85.3	52.9	47.01778	0.747	-101.1	69.7	43.3	43.1	20.3	113.18882	20-21
22	-18.646	-22.819	972.63155	-24.3	9.5	-83.4	58.2	45.36043	0.797	-100.2	66.5	48.6	38.5	11.4	100.33923	21-22
23	-18.553	-26.028	950.53867	-12.2	5.8	-81.7	63.8	44.09168	0.833	-99.4	63.4	53.8	35.5	2.9	92.15824	22-23
24	-18.517	-29.054	942.97556	1.1	2.2	-80.1	69.8	43.12036	0.855	-98.7	60.6	59.0	34.4	-5.3	86.92498	23-24
25	-15.279	-29.161	893.68816	1.4	2.0	-80.0	66.1	41.46283	0.920	-94.5	59.9	58.5	25.9	-2.4	98.10275	24-25
26	-12.350	-29.256	860.82838	2.1	1.9	-80.1	61.8	40.15520	0.970	-90.2	59.3	58.4	17.6	-0.7	88.77761	25-26
27	-9.634	-29.344	841.61143	3.9	1.9	-80.3	55.1	38.77913	0.992	-85.9	58.9	58.5	9.5	-0.1	82.30610	26-27
28	-7.395	-29.416	834.50397	13.7	1.8	-80.6	51.3	37.15991	0.969	-82.2	58.6	58.9	2.7	-0.4	67.86299	27-28

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 19 MIN 37 SEC 668 MS TAB NO 127 ATLAS PHOTO NO 127 POD SEQUENCE NO 260

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
PHOTO DATA				371.131				823.13229	-6.590	-29.160	2558.588	2.241	-69.907	116.162		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.040	-19.715	906.47610	-27.9	6.3	-81.7	54.5	41.95320	0.897	-93.6	68.4	40.4	30.4	27.4	0.	0-1
2	-12.167	-23.635	871.58205	-40.9	6.4	-81.6	49.1	41.42134	0.917	-90.2	64.7	47.6	23.5	15.8	121.19593	1-2
3	-9.516	-26.641	835.18972	-37.4	3.7	-80.8	49.9	39.33431	0.988	-85.6	61.5	53.2	11.9	7.9	120.16063	2-3
4	-9.378	-23.431	851.05188	-57.7	5.4	-81.1	43.9	40.25365	0.956	-85.2	64.2	47.8	17.9	16.0	81.07517	3-4
5	-9.230	-21.038	879.95538	-67.4	7.1	-81.3	38.5	41.40961	0.912	-84.8	67.0	42.4	25.3	24.3	86.58014	4-5
6	-12.099	-20.613	902.42484	-52.7	8.6	-82.3	43.7	42.68474	0.872	-90.2	67.7	42.2	27.7	24.3	87.82262	5-6
7	-15.217	-20.066	940.76268	-42.1	10.5	-83.6	48.5	44.30522	0.819	-95.7	68.6	42.5	35.8	23.0	95.79331	6-7
8	-15.186	-23.264	906.83891	-30.8	7.7	-82.3	53.8	42.89190	0.866	-95.2	65.5	47.9	30.5	14.3	93.48225	7-8
9	-15.189	-26.230	887.98458	-16.1	4.9	-81.2	59.5	41.78719	0.899	-94.8	62.7	53.3	27.0	5.9	86.70327	8-9
10	-12.244	-26.455	854.61440	-22.7	4.2	-80.9	55.0	40.42374	0.950	-90.2	62.0	53.0	19.0	7.5	89.45449	9-10
11	-9.516	-26.641	835.18972	-37.4	3.7	-80.8	49.9	39.33431	0.988	-85.6	61.5	53.2	11.9	7.9	82.80056	10-11
12	-7.438	-29.298	823.73829	11.1	1.9	-80.6	51.1	36.68103	0.969	-82.2	58.7	58.9	2.7	-0.2	101.48332	11-12
13	-7.269	-26.779	828.08628	-69.9	3.3	-80.8	45.9	38.12801	0.989	-81.6	61.1	53.7	7.6	7.5	75.82810	12-13
14	-7.082	-24.142	843.46158	-80.0	4.6	-80.8	38.8	39.43091	0.980	-80.9	63.7	48.4	15.4	15.3	79.43949	13-14
15	-6.873	-21.334	871.34138	-83.4	6.0	-80.7	33.5	40.51783	0.936	-80.1	66.5	43.1	23.4	23.4	84.67035	14-15
16	-6.633	-18.279	913.83925	-85.0	7.2	-80.4	28.8	41.88866	0.880	-79.0	69.5	37.9	31.7	31.5	92.17894	15-16
17	-9.069	-17.880	924.19874	-72.8	8.7	-81.5	33.7	42.87505	0.854	-84.2	70.1	37.2	33.3	32.8	74.73183	16-17
18	-12.042	-17.294	949.79466	-60.4	10.7	-83.0	38.8	44.30134	0.813	-90.3	70.9	36.8	37.0	33.1	91.73876	17-18
19	-15.292	-16.518	993.01721	-50.5	13.2	-85.0	43.6	46.14264	0.756	-96.3	72.0	37.2	42.3	32.0	101.03333	18-19
20	-18.966	-15.452	1059.04807	-42.8	16.7	-87.6	47.9	48.58715	0.680	-102.2	73.4	38.2	49.0	29.6	115.50081	19-20
21	-18.706	-19.337	998.93435	-34.6	13.0	-85.3	52.8	46.41340	0.748	-101.1	69.7	43.3	43.0	20.3	111.65423	20-21
22	-18.543	-22.778	960.12320	-24.5	9.4	-83.5	58.0	44.77690	0.798	-100.2	66.5	48.6	38.4	11.5	99.05212	21-22
23	-18.450	-25.950	938.21976	-12.4	5.8	-81.8	63.5	43.52008	0.834	-99.4	63.5	53.8	35.4	3.0	90.99120	22-23
24	-18.412	-28.936	930.59145	0.9	2.2	-80.2	69.5	42.55395	0.856	-98.7	60.7	59.0	34.3	-5.2	85.80511	23-24
25	-15.220	-29.043	882.11201	1.2	2.1	-80.1	65.7	40.92576	0.920	-94.5	60.0	58.5	25.8	-2.3	96.73995	24-25
26	-12.329	-29.138	849.74666	1.7	2.0	-80.1	61.5	39.63835	0.971	-90.2	59.4	58.4	17.5	-0.6	87.60507	25-26
27	-9.648	-29.226	830.78518	3.1	1.9	-80.3	54.8	38.28094	0.992	-85.9	59.0	58.5	9.5	0.0	81.24486	26-27
28	-7.438	-29.298	823.73829	11.1	1.9	-80.6	51.1	36.68103	0.969	-82.2	58.7	58.9	2.7	-0.2	66.99192	27-28

JULY 31, 1964 13 HR 19 MIN 42 SEC 788 MS TAB NO 128 ATLAS PHOTO NO 128 POD SEQUENCE NO 262

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				366.011		812.35168	-6.629	-29.080	2547.807	2.244	-69.850	116.151				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.031	-19.733	894.69545	-28.0	6.3	-81.7	54.3	41.41499	0.898	-93.6	68.4	40.4	30.4	27.3	0.	0-1
2	-12.149	-23.587	860.44443	-41.0	6.4	-81.6	49.0	40.89204	0.917	-90.2	64.8	47.6	23.5	15.9	119.25900	1-2
3	-9.533	-26.556	824.42684	-37.7	3.7	-80.8	49.7	38.82743	0.987	-85.6	61.6	53.2	11.9	8.0	118.64804	2-3
4	-9.396	-23.880	840.17863	-57.8	5.4	-81.1	43.8	39.73932	0.955	-85.2	64.2	47.8	18.0	16.1	80.05297	3-4
5	-9.250	-21.023	868.76138	-67.4	7.1	-81.3	38.5	40.88278	0.912	-84.8	67.0	42.4	25.4	24.4	85.49206	4-5
6	-12.083	-20.604	890.93936	-52.8	8.5	-82.3	43.7	42.14151	0.872	-90.2	67.7	42.2	29.7	24.3	86.70339	5-6
7	-15.159	-20.065	928.70472	-42.2	10.4	-83.6	48.4	43.73851	0.819	-95.7	68.6	42.5	35.7	23.0	94.53646	6-7
8	-15.129	-23.221	895.18082	-30.9	7.7	-82.4	53.6	42.34045	0.866	-95.2	65.5	47.9	30.5	14.4	92.29489	7-8
9	-15.131	-26.149	876.47152	-16.3	4.9	-81.3	59.3	41.24536	0.899	-94.8	62.7	53.3	27.0	6.0	85.60511	8-9
10	-12.225	-26.371	843.59785	-22.9	4.2	-80.9	54.8	39.90267	0.950	-90.2	62.1	53.0	19.0	7.6	88.27355	9-10
11	-9.533	-26.556	824.42684	-37.7	3.7	-80.8	49.7	38.82743	0.987	-85.6	61.6	53.2	11.9	8.0	81.73237	10-11
12	-7.481	-29.179	812.96175	8.5	1.9	-80.6	50.9	36.20180	0.969	-82.2	58.8	58.9	2.7	-0.1	100.18369	11-12
13	-7.314	-26.693	817.38000	-69.8	3.3	-80.7	45.8	37.64304	0.989	-81.6	61.2	53.7	7.7	7.5	74.84913	12-13
14	-7.130	-24.089	832.64688	-79.8	4.7	-80.8	38.8	38.92518	0.979	-80.9	63.8	48.4	15.4	15.4	78.43387	13-14
15	-6.923	-21.316	860.21626	-83.2	6.0	-80.7	33.6	40.00031	0.936	-80.1	66.5	43.1	23.4	23.4	83.60205	14-15
16	-6.687	-18.300	902.15835	-84.9	7.2	-80.4	29.0	41.35306	0.880	-79.0	69.5	38.0	31.6	31.5	90.99514	15-16
17	-9.091	-17.906	912.42635	-72.7	8.7	-81.5	33.8	42.32892	0.855	-84.2	70.1	37.2	33.3	32.8	73.78379	16-17
18	-12.027	-17.327	937.67797	-60.4	10.7	-83.0	38.8	43.73632	0.813	-90.3	70.9	36.8	37.0	33.0	90.56410	17-18
19	-15.233	-16.565	980.22969	-50.5	13.2	-85.0	43.5	45.54859	0.757	-96.3	71.9	37.2	42.2	32.0	99.68791	18-19
20	-18.856	-15.520	1045.10889	-42.8	16.6	-87.6	47.8	47.94770	0.682	-102.2	73.3	38.2	48.8	29.5	113.82973	19-20
21	-18.600	-19.349	985.91416	-34.7	13.0	-85.3	52.6	45.80834	0.749	-101.1	69.7	43.3	42.9	20.3	110.12043	20-21
22	-18.439	-22.749	947.60114	-24.6	9.4	-83.5	57.8	44.19274	0.799	-100.2	66.5	48.6	38.3	11.5	97.76341	21-22
23	-18.347	-25.873	925.89018	-12.5	5.8	-81.9	63.3	42.94799	0.835	-99.4	63.6	53.8	35.3	3.1	89.82243	22-23
24	-18.308	-28.818	918.20142	0.7	2.3	-80.4	69.1	41.98726	0.857	-98.7	60.8	59.0	34.2	-5.0	84.68439	23-24
25	-15.161	-28.925	870.52568	0.9	2.1	-80.1	65.4	40.38821	0.921	-94.5	60.1	58.5	25.7	-2.1	95.37887	24-25
26	-12.309	-29.020	838.65324	1.3	2.0	-80.2	61.2	39.12095	0.971	-90.2	59.5	58.4	17.5	-0.5	86.43209	25-26
27	-9.663	-29.107	819.94724	2.4	1.9	-80.4	54.5	37.78236	0.992	-85.9	59.1	58.5	9.5	0.1	80.18257	26-27
28	-7.481	-29.179	812.96175	8.5	1.9	-80.6	50.9	36.20180	0.969	-82.2	58.8	58.9	2.7	-0.1	66.11992	27-28

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JULY 31, 1964 13 HR 19 MIN 47 SEC 908 MS TAB NO 129 ATLAS PHOTO NO 129 POD SEQUENCE NO 264

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				360.891		801.55734	-6.668	-28.999	2537.013	2.248	-69.794	116.139		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-11.023	-19.751	882.89754	-28.2	6.3	-81.8	54.2	40.87655	0.898	-93.6	68.4	40.5	30.3	27.3
2	-12.132	-23.538	849.30322	-41.2	6.4	-81.6	48.8	40.36256	0.917	-90.2	64.8	47.6	23.5	15.9
3	-9.549	-26.469	813.65493	-37.9	3.7	-80.8	49.6	38.32012	0.987	-85.6	61.7	53.2	12.0	8.1
4	-9.414	-23.827	829.30058	-57.8	5.4	-81.1	43.7	39.22476	0.955	-85.2	64.3	47.8	18.0	16.1
5	-9.270	-21.007	857.56890	-67.4	7.1	-81.3	38.5	40.35602	0.912	-84.8	67.0	42.4	25.4	24.4
6	-12.066	-20.593	879.45732	-52.8	8.5	-82.3	43.6	41.59843	0.872	-90.2	67.7	42.2	29.7	24.4
7	-15.102	-20.062	916.65480	-42.3	10.4	-83.6	48.3	43.17101	0.820	-95.7	68.6	42.5	35.7	23.0
8	-15.072	-23.177	883.52238	-31.1	7.7	-82.4	53.4	41.78897	0.866	-95.2	65.6	47.9	30.4	14.4
9	-15.074	-26.067	864.95275	-16.5	4.9	-81.3	59.0	40.70325	0.900	-94.8	62.8	53.3	26.9	6.1
10	-12.206	-26.286	832.57307	-23.2	4.2	-81.0	54.6	39.38121	0.949	-90.2	62.2	53.0	19.1	7.7
11	-9.549	-26.469	813.65493	-37.9	3.7	-80.8	49.6	38.32012	0.987	-85.6	61.7	53.2	12.0	8.1
12	-7.525	-29.059	802.17369	5.9	1.9	-80.6	50.7	35.72221	0.969	-82.2	58.9	58.9	2.7	0.0
13	-7.359	-26.605	806.66493	-69.7	3.3	-80.7	45.7	37.15797	0.989	-81.6	61.3	53.7	7.8	7.6
14	-7.177	-24.035	821.82751	-79.7	4.7	-80.7	38.8	38.41923	0.979	-80.9	63.9	48.4	15.5	15.5
15	-6.973	-21.296	849.09253	-83.1	6.0	-80.6	33.7	39.48284	0.936	-80.1	66.5	43.1	23.5	23.4
16	-6.740	-18.319	890.48808	-84.9	7.2	-80.4	29.1	40.81792	0.880	-79.0	69.5	38.0	31.6	31.5
17	-9.113	-17.929	900.66522	-72.7	8.7	-81.5	33.8	41.78328	0.855	-84.2	70.0	37.2	33.3	32.7
18	-12.011	-17.359	925.57598	-60.5	10.6	-83.0	38.8	43.17196	0.814	-90.3	70.8	36.8	36.9	33.0
19	-15.175	-16.667	967.44412	-50.6	13.1	-85.0	43.5	44.95556	0.758	-96.3	71.9	37.2	42.2	31.9
20	-18.746	-15.585	1031.20789	-42.9	16.5	-87.1	47.8	47.31000	0.683	-102.2	73.3	38.2	48.7	29.4
21	-18.495	-19.359	972.91205	-34.8	12.9	-85.4	52.5	45.20411	0.751	-101.1	69.7	43.3	42.8	20.3
22	-18.336	-22.712	935.08585	-24.7	9.4	-83.6	57.6	43.60888	0.800	-100.1	66.5	48.6	38.4	11.2
23	-18.244	-25.793	913.56069	-12.7	5.8	-82.0	63.0	42.37587	0.835	-99.4	63.6	53.8	35.2	3.2
24	-18.204	-28.698	905.80765	0.5	2.3	-80.5	68.8	41.42037	0.858	-98.7	60.9	59.0	34.1	-4.8
25	-15.102	-28.805	858.93034	0.6	2.1	-80.2	65.0	39.85023	0.921	-94.5	60.2	58.5	25.7	-2.0
26	-12.288	-28.900	827.54858	0.9	2.0	-80.2	60.8	38.60302	0.971	-90.2	59.7	58.4	17.5	-0.3
27	-9.678	-28.988	809.09743	1.7	1.9	-80.4	54.2	37.28340	0.992	-85.9	59.2	58.5	9.5	0.2
28	-7.525	-29.059	802.17369	5.9	1.9	-80.6	50.7	35.72221	0.969	-82.2	58.9	58.9	2.7	0.0

JULY 31, 1964 13 HR 19 MIN 53 SEC 28 MS TAB NO 130 ATLAS PHOTO NO 130 POD SEQUENCE NO 266

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				355.771		790.74936	-6.708	-28.918	2526.205	2.252	-69.737	116.128		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-11.015	-19.769	871.08262	-28.4	6.3	-81.8	54.0	40.33739	0.898	-93.6	68.4	40.5	30.3	27.2
2	-12.114	-23.489	838.14647	-41.3	6.4	-81.7	48.7	39.83234	0.917	-90.2	64.9	47.6	23.5	16.0
3	-9.566	-26.382	802.86887	-38.2	3.7	-80.8	49.4	37.81214	0.987	-85.6	61.8	53.2	12.0	8.2
4	-9.432	-23.774	818.40713	-57.9	5.4	-81.1	43.7	38.70946	0.955	-85.2	64.3	47.8	18.1	16.2
5	-9.290	-20.990	846.36072	-67.3	7.1	-81.3	38.5	39.82851	0.911	-84.7	67.0	42.4	25.4	24.4
6	-12.050	-20.581	867.95956	-52.9	8.5	-82.3	43.6	41.05461	0.872	-90.2	67.7	42.2	29.7	24.4
7	-15.045	-20.059	904.59103	-42.4	10.4	-83.6	48.2	42.60287	0.820	-95.7	68.5	42.5	35.6	23.1
8	-15.015	-23.133	871.84979	-31.2	7.7	-82.5	53.2	41.23683	0.866	-95.2	65.6	47.9	30.4	14.5
9	-15.016	-25.984	853.42115	-16.7	4.9	-81.4	58.7	40.16054	0.900	-94.8	62.9	53.3	26.9	6.2
10	-12.187	-26.201	821.53410	-23.5	4.2	-81.0	54.3	38.85908	0.949	-90.2	62.3	53.0	19.1	7.8
11	-9.566	-26.382	802.86887	-38.2	3.7	-80.8	49.4	37.81214	0.987	-85.6	61.8	53.2	12.0	8.2
12	-7.568	-28.938	791.37445	3.3	1.9	-80.6	50.5	35.24228	0.969	-82.2	59.0	58.9	2.7	0.1
13	-7.405	-26.517	795.93661	-69.6	3.3	-80.7	45.6	36.67226	0.989	-81.6	61.4	53.7	7.9	7.7
14	-7.225	-23.980	810.99361	-79.6	4.7	-80.7	38.8	37.91260	0.979	-80.9	63.9	48.4	15.5	15.5
15	-7.023	-21.277	837.95402	-83.0	6.0	-80.6	33.7	38.96468	0.936	-80.1	66.6	43.1	23.5	23.4
16	-6.793	-18.338	878.80426	-84.8	7.2	-80.4	29.2	40.28215	0.880	-79.0	69.5	37.9	31.6	31.5
17	-9.136	-17.953	888.88966	-72.6	8.7	-81.5	33.9	41.23698	0.855	-84.2	70.0	37.2	33.3	32.7
18	-11.995	-17.391	913.46002	-60.5	10.6	-83.0	38.8	42.60695	0.814	-90.3	70.8	36.8	36.9	33.0
19	-15.117	-16.653	954.68774	-50.6	13.1	-85.0	43.4	44.36202	0.759	-96.3	71.8	37.2	42.1	31.9
20	-18.637	-15.650	1017.30515	-43.0	16.4	-87.6	47.7	46.67221	0.685	-102.2	73.2	38.2	48.6	29.4
21	-18.390	-19.369	959.90176	-34.9	12.8	-85.4	52.4	44.59949	0.752	-101.1	69.6	43.3	42.7	20.3
22	-18.233	-22.675	922.56083	-24.8	9.3	-83.6	57.4	43.02456	0.801	-100.1	66.5	48.6	38.1	11.7
23	-18.141	-25.714	901.22243	-12.9	5.8	-82.1	62.7	41.80334	0.836	-99.4	63.7	53.8	35.1	3.4
24	-18.100	-28.578	893.40814	0.3	2.3	-80.6	68.4	40.85321	0.859	-98.7	61.0	59.0	34.0	-4.7
25	-15.042	-28.685	847.32476	0.4	2.2	-80.3	64.7	39.31177	0.922	-94.5	60.3	58.5	25.6	-1.8
26	-12.268	-28.780	816.43208	0.5	2.0	-80.3	60.5	38.08454	0.971	-90.2	59.8	58.4	17.5	-0.2
27	-9.692	-28.867	798.23569	1.0	1.9	-80.4	54.0	36.78404	0.992	-85.9	59.3	58.5	9.5	0.4
28	-7.568	-28.938	791.37445	3.3	1.9	-80.6	50.5	35.24228	0.969	-82.2	59.0	58.9	2.7	0.1

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JULY 31, 1964 13 HR 19 MIN 58 SEC 148 MS TAB NO 131 ATLAS PHOTO NO 131 POD SEQUENCE NO 268

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				350.651		779.92789	-6.748	-28.836	2515.383	2.255	-69.679	116.116				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.006	-19.787	859.25066	-28.6	6.3	-81.9	53.8	39.79735	0.898	-93.6	68.4	40.5	30.2	27.2	0.	0-1
2	-12.097	-23.439	826.97034	-41.4	6.4	-81.7	48.6	39.30120	0.917	-90.2	64.9	47.6	23.5	16.0	113.31700	1-2
3	-9.582	-26.295	792.06699	-38.5	3.7	-80.8	49.2	37.30342	0.987	-85.6	61.9	53.2	12.1	8.3	114.09735	2-3
4	-9.451	-23.721	807.49479	-57.9	5.4	-81.1	43.6	38.19328	0.955	-85.2	64.4	47.8	18.1	16.3	76.98219	3-4
5	-9.311	-20.974	835.13126	-67.3	7.1	-81.3	38.5	39.30000	0.911	-84.7	67.1	42.4	25.4	24.4	82.22849	4-5
6	-12.033	-20.570	856.44000	-52.9	8.5	-82.3	43.5	40.50975	0.872	-90.2	67.7	42.2	29.7	24.4	83.34320	5-6
7	-14.988	-20.056	892.50645	-42.5	10.3	-83.7	48.1	42.03374	0.820	-94.7	55.5	42.5	35.6	23.1	90.77049	6-7
8	-14.958	-23.088	860.15868	-31.4	7.6	-82.5	52.1	40.08382	0.867	-95.2	65.6	47.9	30.4	14.6	88.73838	7-8
9	-14.958	-25.901	841.87438	-16.9	4.9	-81.5	58.5	39.61711	0.900	-94.8	62.9	53.3	26.9	6.3	82.30874	8-9
10	-12.168	-26.116	810.47894	-23.8	4.2	-81.0	54.1	38.33618	0.949	-90.2	62.3	53.0	19.1	7.8	84.72940	9-10
11	-9.582	-26.795	792.06699	-38.5	3.7	-80.8	49.2	37.30342	0.987	-85.6	61.9	53.2	12.1	8.3	78.52187	10-11
12	-7.612	-28.818	780.56401	0.7	1.9	-80.6	50.3	34.76199	0.969	-82.2	59.2	58.9	2.8	0.3	96.27772	11-12
13	-7.450	-28.429	785.19344	-69.5	3.3	-80.7	45.5	36.18575	0.990	-81.6	61.5	53.7	8.0	7.8	71.90741	12-13
14	-7.273	-23.925	800.14202	-79.4	4.7	-80.7	38.8	37.40515	0.979	-80.9	64.0	48.4	15.6	15.6	75.41325	13-14
15	-7.074	-21.257	826.79554	-82.9	6.0	-80.6	33.8	36.44560	0.936	-80.0	66.6	43.1	23.5	23.5	80.39780	14-15
16	-6.847	-18.357	867.09914	-84.7	7.3	-80.3	29.3	39.74541	0.880	-79.0	69.5	37.9	31.6	31.5	87.45459	15-16
17	-9.158	-17.976	877.09142	-72.6	8.7	-81.5	33.9	40.68962	0.855	-84.2	70.0	37.2	33.2	32.7	70.93815	16-17
18	-11.980	-17.422	901.32099	-60.5	10.6	-83.0	38.8	42.04086	0.814	-90.3	70.8	36.8	36.9	32.9	87.04184	17-18
19	-15.058	-16.697	941.89004	-50.7	13.0	-85.0	43.4	43.76748	0.759	-96.3	71.8	37.2	42.0	31.8	95.66330	18-19
20	-18.527	-15.714	1003.38804	-43.0	16.3	-87.6	47.6	46.03377	0.687	-102.2	73.1	38.2	48.5	29.3	108.86584	19-20
21	-18.285	-19.378	946.87503	-35.0	12.8	-85.4	52.2	43.99412	0.753	-101.1	69.6	43.3	42.6	20.3	105.56464	20-21
22	-18.130	-22.638	910.02081	-25.0	9.3	-83.7	57.2	42.43955	0.802	-100.1	66.5	48.6	38.1	11.8	93.91165	21-22
23	-18.038	-25.635	888.87263	-13.1	5.8	-82.1	62.5	41.23029	0.837	-99.4	63.7	53.8	35.1	3.5	86.31847	22-23
24	-17.996	-28.458	881.00215	0.1	2.4	-80.7	68.1	40.28575	0.860	-98.7	61.1	59.0	33.9	-4.5	81.32154	23-24
25	-14.983	-28.565	835.70855	0.1	2.2	-80.4	64.3	38.77281	0.922	-94.5	60.4	58.5	25.6	-1.7	91.30790	24-25
26	-12.247	-28.660	805.30346	0.1	2.1	-80.3	60.2	37.56549	0.971	-90.2	59.9	58.4	17.4	-0.1	82.91228	25-26
27	-9.707	-28.747	787.36188	0.2	2.0	-80.4	53.7	36.28426	0.992	-85.9	59.5	58.5	9.5	0.5	76.98960	26-27
28	-7.612	-28.818	780.56401	0.7	1.9	-80.6	50.3	34.76199	0.969	-82.2	59.2	58.9	2.8	0.3	63.49792	27-28

JULY 31, 1964 13 HR 20 MIN 3 SEC 268 MS TAB NO 132 ATLAS PHOTO NO 132 POD SEQUENCE NO 270

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				345.532		769.09219	-6.788	-28.753	2504.547	2.259	-69.621	116.104				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.998	-19.804	847.40094	-28.7	6.3	-81.9	53.6	39.25557	0.898	-93.6	68.4	40.5	30.2	27.1	0.	0-1
2	-12.079	-23.393	815.75313	-41.5	6.4	-81.7	48.5	38.76811	0.917	-90.2	65.0	47.6	23.6	16.1	111.41734	1-2
3	-9.599	-26.211	781.23917	-38.7	3.7	-80.8	49.1	36.79348	0.986	-85.6	61.9	53.2	12.2	8.3	112.56942	2-3
4	-9.469	-23.671	796.54312	-57.9	5.4	-81.1	43.5	37.67524	0.954	-85.2	64.4	47.8	18.2	16.3	75.95113	3-4
5	-9.331	-20.960	823.84781	-67.3	7.1	-81.3	38.5	38.76897	0.911	-84.7	67.1	42.4	25.4	24.4	81.12941	4-5
6	-12.017	-20.562	844.86366	-53.0	8.5	-82.4	43.5	39.96221	0.873	-90.2	67.7	42.2	29.7	24.4	82.21542	5-6
7	-14.931	-20.056	880.36246	-42.6	10.3	-83.7	48.0	41.46181	0.821	-95.7	68.5	42.5	35.6	23.1	89.50800	6-7
8	-14.901	-23.047	848.42528	-31.5	7.6	-82.6	52.9	40.12881	0.867	-95.2	65.7	47.9	30.4	14.6	87.54015	7-8
9	-14.900	-25.821	830.30093	-17.1	4.9	-81.5	58.3	39.07244	0.900	-94.8	63.0	53.3	26.8	6.4	81.20152	8-9
10	-12.150	-26.033	799.39700	-24.0	4.3	-81.1	53.9	37.81202	0.949	-90.2	62.4	53.0	19.1	7.9	83.54491	9-10
11	-9.599	-26.211	781.23917	-38.7	3.7	-80.8	49.1	36.79348	0.986	-85.6	61.9	53.2	12.2	8.3	77.44753	10-11
12	-7.655	-28.700	769.74160	-1.6	1.9	-80.6	50.1	34.28129	0.969	-82.2	59.3	58.9	2.8	0.4	94.97026	11-12
13	-7.496	-26.343	774.42564	-69.4	3.3	-80.7	45.4	35.49738	0.990	-81.6	61.6	53.7	8.1	7.9	70.92346	12-13
14	-7.320	-23.872	789.25285	-79.3	4.7	-80.7	38.8	36.89596	0.978	-80.9	64.0	48.4	15.6	15.6	74.39932	13-14
15	-7.124	-21.240	815.58541	-82.8	6.0	-80.6	33.9	37.92415	0.936	-80.0	66.6	43.1	23.5	23.5	79.31913	14-15
16	-6.900	-18.380	855.32608	-84.6	7.3	-80.3	29.4	39.20562	0.881	-79.0	69.4	38.0	31.6	31.5	86.26033	15-16
17	-9.181	-18.003	865.22202	-72.6	8.7	-81.5	34.0	40.13900	0.855	-84.2	70.0	37.2	33.2	32.7	69.98193	16-17
18	-11.964	-17.458	889.10675	-60.5	10.6	-83.0	38.8	41.47126	0.815	-90.3	70.7	36.8	36.8	32.9	85.85817	17-18
19	-15.000	-16.745	929.01284	-50.7	13.0	-85.0	43.3	43.16924	0.760	-96.3	71.7	37.2	42.0	31.8	94.31687	18-19
20	-18.417	-15.783	989.38820	-43.1	16.1	-87.5	47.5	45.39152	0.688	-102.2	73.0	38.2	48.4	29.3	107.20757	19-20
21	-18.179	-19.391	933.78737	-35.1	12.7	-85.4	52.1	43.38594	0.754	-101.1	69.6	43.3	42.5	20.3	104.03004	20-21
22	-18.026	-22.604	897.43884	-25.1	9.3	-83.7	57.0	41.85262	0.803	-100.1	66.6	48.6	38.0	11.8	92.61458	21-22
23	-17.935	-25.558	876.49828	-13.3	5.8	-82.2	62.2	40.65614	0.838	-99.4	63.8	53.8	35.0	3.6	85.14173	22-23
24	-17.892	-28.340	868.58898	-0.1	2.4	-80.8	67.7	39.71803	0.861	-98.7	61.2	59.0	33.8	-4.4	80.19694	23-24
25	-14.924	-28.448	824.08093	-0.2	2.2	-80.5	64.0	38.23335	0.923	-94.4	60.5	58.5	25.5	-1.6	89.95414	24-25
26	-12.227	-28.543	794.16199	-0.3	2.1	-80.4	59.9	37.04584	0.971	-90.2	60.0	58.4	17.4	0.0	81.73819	25-26
27	-9.722	-28.629	776.47523	-0.5	2.0	-80.4	53.4	35.78400	0.992	-85.9	59.6	58.5	9.5	0.6	75.92296	26-27
28	-7.655	-28.700	769.74160	-1.6	1.9	-80.6	50.1	34.28129	0.969	-82.2	59.3	58.9	2.8	0.4	62.62182	27-28

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JULY 31, 1964 13 HR 20 MIN 8 SEC 388 MS TAB NO 133 ATLAS PHOTO NO 133 POD SEQUENCE NO 272

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				340.412			758.24286	-6.829	-28.669	2493.698	2.263	-69.563	116.093			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.989	-19.822	835.53405	-28.9	6.3	-82.0	53.4	38.71278	0.898	-93.6	68.3	40.6	30.1	27.1	0.	0-
2	-12.062	-23.347	804.51357	-41.7	6.4	-81.7	48.3	38.23396	0.917	-90.2	65.0	47.6	23.6	16.1	109.53235	1-2
3	-9.615	-26.126	770.39382	-39.0	3.7	-80.8	48.9	36.28271	0.986	-85.6	62.0	53.2	12.2	8.4	111.03757	2-3
4	-9.488	-23.622	785.56973	-38.0	5.4	-81.1	43.5	37.15618	0.954	-85.2	64.5	47.8	18.2	16.3	74.91752	3-4
5	-9.351	-20.947	812.53891	-67.3	7.1	-81.3	38.6	38.23675	0.911	-84.7	67.1	42.5	25.5	24.4	80.02703	4-5
6	-12.001	-20.555	833.26107	-53.0	8.5	-82.4	43.4	39.41344	0.873	-90.2	67.7	42.2	29.7	24.4	81.08507	5-6
7	-14.873	-20.057	868.19285	-42.6	10.3	-83.7	47.9	40.88667	0.821	-95.7	68.5	42.5	35.5	23.1	88.24364	6-7
8	-14.843	-23.006	836.67014	-31.6	7.6	-82.6	52.8	39.57278	0.867	-95.2	65.7	47.9	30.3	14.7	86.33844	7-8
9	-14.842	-25.741	818.71049	-17.3	4.9	-81.6	58.0	38.52698	0.901	-94.8	63.1	53.3	26.8	6.5	80.09160	8-9
10	-12.131	-25.951	788.29713	-24.2	4.3	-81.1	53.7	37.28701	0.949	-90.2	62.5	53.0	19.1	8.0	82.35920	9-10
11	-9.615	-26.126	770.39382	-39.0	3.7	-80.8	48.9	36.28271	0.986	-85.6	62.0	53.2	12.2	8.4	76.37159	10-11
12	-7.699	-28.582	758.90737	-3.8	1.9	-80.6	49.9	33.80018	0.969	-82.2	59.4	58.9	2.9	0.5	93.66066	11-12
13	-7.542	-26.257	763.64142	-69.3	3.4	-80.7	45.4	35.20803	0.990	-81.6	61.7	53.7	8.2	8.0	69.93809	12-13
14	-7.368	-23.820	778.34319	-79.2	4.7	-80.7	38.8	36.38582	0.978	-80.9	64.1	48.4	15.7	15.7	73.38299	13-14
15	-7.175	-21.224	804.35127	-82.7	6.1	-80.5	34.0	37.40161	0.936	-80.1	66.6	43.1	23.5	23.5	78.23737	14-15
16	-6.954	-18.403	843.52610	-84.5	7.3	-80.3	29.6	38.66462	0.881	-79.0	69.4	38.0	31.5	31.4	85.06270	15-16
17	-9.203	-18.031	853.32408	-72.5	8.7	-81.4	34.1	39.58705	0.856	-84.2	69.9	37.2	33.2	32.6	69.02337	16-17
18	-11.948	-17.493	876.86318	-60.5	10.6	-83.0	38.9	40.90029	0.815	-90.3	70.7	36.9	36.8	32.9	84.67174	17-18
19	-14.941	-16.794	916.10752	-50.8	12.9	-85.0	43.3	42.56969	0.761	-96.3	71.7	37.2	41.9	31.7	92.96563	18-19
20	-18.307	-15.852	975.36617	-43.1	16.0	-87.5	47.4	44.74825	0.690	-102.2	72.9	38.2	48.2	29.2	105.55103	19-20
21	-16.074	-12.455	900.47786	-35.1	12.6	-85.5	52.0	42.77674	0.755	-101.1	69.6	43.3	42.4	20.3	102.49366	20-21
22	-17.923	-22.571	884.83831	-25.2	9.2	-83.6	50.6	41.25154	0.804	-100.1	66.6	48.6	37.9	11.9	91.31452	21-22
23	-17.832	-25.482	864.11031	-13.4	5.8	-82.3	61.9	40.08138	0.839	-99.3	63.8	53.8	34.7	3.7	83.72244	22-23
24	-17.788	-28.224	856.16856	-0.3	2.4	-80.9	67.4	39.14999	0.862	-98.7	61.3	59.0	33.7	4.2	79.07104	23-24
25	-14.865	-28.331	812.44194	-0.4	2.2	-80.6	63.7	37.69337	0.923	-94.4	60.6	58.6	25.4	-1.4	88.60187	24-25
26	-12.206	-28.426	783.00776	-0.6	2.1	-80.4	59.6	36.52559	0.971	-90.2	60.1	58.4	17.4	0.1	80.56346	25-26
27	-9.737	-28.512	765.57590	-1.2	2.0	-80.5	53.2	35.28325	0.992	-85.9	59.7	58.5	9.5	0.7	74.85544	26-27
28	-7.699	-28.582	758.90737	-3.8	1.9	-80.6	49.9	33.80018	0.969	-82.2	59.4	58.9	2.9	0.5	61.74466	27-28

JULY 31, 1964 13 HR 20 MIN 13 SEC 508 MS TAB NO 134 ATLAS PHOTO NO 134 POD SEQUENCE NO 274

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				335.292		747.37943	-6.870	-28.585	2482.835	2.267	-69.504	116.080				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.981	-19.839	823.64948	-29.0	6.3	-82.0	53.2	38.16909	0.898	-93.6	68.3	40.6	30.1	27.0	0.	0-1
2	-12.044	-23.300	793.25421	-41.8	6.4	-81.8	48.2	37.69886	0.916	-90.2	65.1	47.6	23.6	16.1	107.65104	1-2
3	-9.632	-26.042	759.53188	-39.2	3.8	-80.8	48.8	35.77116	0.986	-85.6	62.1	53.2	12.3	8.5	109.50250	2-3
4	-9.506	-23.572	774.57706	-58.0	5.4	-81.1	43.4	36.63620	0.954	-85.2	64.5	47.8	18.3	16.4	73.88182	3-4
5	-9.372	-20.934	801.20879	-67.3	7.1	-81.3	38.6	37.70353	0.911	-84.7	67.1	42.5	25.5	24.4	78.92221	4-5
6	-11.984	-20.547	821.63676	-53.1	8.5	-82.4	43.4	38.66363	0.873	-90.2	67.7	42.2	29.7	24.4	79.95272	5-6
7	-14.816	-20.058	856.00268	-42.7	10.2	-83.7	47.8	40.31457	0.822	-95.7	68.5	42.5	35.5	23.1	86.97787	6-7
8	-14.786	-22.965	824.89609	-31.8	7.6	-82.6	52.6	39.01585	0.867	-95.2	65.7	47.9	30.3	14.7	85.13441	7-8
9	-14.784	-25.661	807.10404	-17.5	4.9	-81.6	57.8	37.98077	0.901	-94.8	63.2	53.3	26.8	6.6	78.97950	8-9
10	-12.112	-25.869	777.18031	-24.5	4.3	-81.1	53.5	36.76119	0.949	-90.2	62.6	53.1	19.1	8.1	81.17242	9-10
11	-9.632	-26.042	759.53188	-39.2	3.8	-80.8	48.8	35.77116	0.986	-85.6	62.1	53.2	12.3	8.5	75.29395	10-11
12	-7.743	-28.463	748.06085	-5.9	2.0	-80.6	49.7	33.31863	0.969	-82.2	59.5	58.9	2.9	0.6	92.34899	11-12
13	-7.588	-26.172	752.84158	-69.2	3.4	-80.6	45.3	34.71785	0.990	-81.6	61.8	53.7	8.3	8.1	68.95144	12-13
14	-7.417	-23.768	767.41542	-79.0	4.8	-80.6	38.8	35.87484	0.978	-80.9	64.1	48.4	15.7	15.7	72.36471	13-14
15	-7.226	-21.207	793.09719	-82.6	6.1	-80.5	34.1	36.87814	0.935	-80.1	66.7	43.1	23.5	23.5	77.15336	14-15
16	-7.008	-18.426	831.70545	-84.4	7.3	-80.3	29.7	38.12267	0.881	-79.0	69.4	38.0	31.5	31.4	83.86308	15-16
17	-9.226	-18.059	841.40415	-72.5	8.7	-81.4	34.1	39.03408	0.856	-84.2	69.9	37.2	33.2	32.6	68.06286	16-17
18	-11.933	-17.530	864.59740	-60.5	10.5	-83.0	38.9	40.32829	0.816	-90.3	70.7	36.9	36.7	32.8	83.48330	17-18
19	-14.882	-16.863	903.18207	-50.8	12.9	-85.0	43.3	41.96919	0.762	-96.3	71.6	37.2	41.8	31.7	91.61355	18-19
20	-18.197	-15.921	961.33137	-43.2	15.9	-87.5	47.4	44.10439	0.692	-102.2	72.9	38.2	48.1	29.1	103.89793	19-20
21	-17.968	-19.419	907.55234	-35.2	12.5	-85.5	51.9	42.16681	0.756	-101.1	69.5	43.3	42.3	20.3	100.95804	20-21
22	-17.819	-22.537	872.22251	-25.4	9.2	-83.8	56.6	40.67635	0.805	-100.1	66.6	48.6	37.8	11.9	90.01284	21-22
23	-17.729	-25.406	851.70992	-13.6	5.8	-82.4	61.7	39.50605	0.840	-99.3	63.9	53.9	34.8	3.8	82.78126	22-23
24	-17.684	-28.107	843.74016	-0.5	2.5	-81.0	67.1	38.58159	0.863	-98.7	61.3	59.0	33.5	-4.1	77.94406	23-24
25	-14.805	-28.214	800.79101	-0.7	2.3	-80.7	63.4	37.15283	0.924	-94.4	60.7	58.6	25.4	-1.3	87.25090	24-25
26	-12.186	-28.309	771.84020	-1.0	2.1	-80.5	59.3	36.00472	0.971	-90.2	60.2	58.4	17.4	0.3	79.38837	25-26
27	-9.751	-28.394	754.66335	-1.8	2.0	-80.5	52.9	34.78199	0.992	-85.9	59.8	58.5	9.5	0.8	73.78637	26-27
28	-7.743	-28.463	748.06085	-5.9	2.0	-80.6	49.7	33.31863	0.969	-82.2	59.5	58.9	2.9	0.6	60.86646	27-28

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JULY 31, 1964 13 HR 20 MIN 18 SEC 628 MS TAB NO 135 ATLAS PHOTO NO 135 POD SEQUENCE NO 276

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LONG	R	V	PTH	AZ				
PHOTO DATA				330.172		736.50204	-6.911	-28.499	2471.957	2.270	-69.445	116.068				
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.973	-19.857	811.74749	-29.2	6.3	-82.1	53.1	37.62490	0.898	-93.6	68.3	40.6	30.0	27.0	0.	0-1
2	-12.027	-23.254	781.98220	-41.9	6.4	-81.8	48.1	37.16317	0.916	-90.2	65.1	47.6	23.6	16.2	105.76316	1-2
3	-9.649	-25.958	748.65685	-39.5	3.8	-80.8	48.6	35.25899	0.986	-85.6	62.2	53.2	12.4	8.6	107.96593	2-3
4	-9.525	-23.522	763.56950	-58.0	5.5	-81.1	43.4	36.11552	0.954	-85.2	64.6	47.8	18.3	16.4	72.84452	3-4
5	-9.392	-20.921	789.86301	-67.2	7.1	-81.3	38.6	37.16957	0.911	-84.7	67.1	42.5	25.5	24.4	77.81580	4-5
6	-11.968	-20.540	809.99931	-53.1	8.5	-82.4	43.3	38.31319	0.873	-90.2	67.7	42.2	29.7	24.4	78.81955	5-6
7	-14.758	-20.058	843.80426	-42.8	10.2	-83.7	47.7	39.74007	0.822	-95.7	68.5	42.5	35.4	23.1	65.71315	6-7
8	-14.729	-22.923	813.11366	-31.9	7.6	-82.7	52.4	36.45853	0.868	-95.2	65.8	47.9	30.3	14.8	83.92975	7-8
9	-14.725	-25.581	795.49075	-17.7	5.0	-81.7	57.5	37.43423	0.901	-94.8	63.2	53.3	26.7	6.7	77.86642	8-9
10	-12.093	-25.786	766.05253	-24.7	4.3	-81.2	53.3	36.23486	0.949	-90.2	62.7	53.1	19.1	8.2	79.98659	9-10
11	-9.649	-25.958	748.65685	-39.5	3.8	-80.8	48.6	35.25899	0.986	-85.6	62.2	53.2	12.4	8.6	74.21560	10-11
12	-7.787	-28.345	737.20303	-8.0	2.0	-80.5	49.5	32.83673	0.969	-82.2	59.7	58.9	3.0	0.7	91.03587	11-12
13	-7.634	-26.086	742.02782	-69.0	3.4	-80.6	45.2	34.22698	0.991	-81.6	61.9	53.7	8.4	8.2	67.96364	12-13
14	-7.465	-23.716	756.47189	-78.9	4.8	-80.6	38.9	35.36312	0.978	-80.9	64.2	48.4	15.8	15.8	71.34478	13-14
15	-7.277	-21.191	781.82645	-82.5	6.1	-80.5	34.1	36.35390	0.935	-80.0	66.7	43.1	23.6	23.5	76.06765	14-15
16	-7.062	-18.449	819.86866	-84.3	7.3	-80.2	29.8	37.57996	0.881	-79.0	69.4	38.0	31.5	31.4	82.66236	15-16
17	-9.249	-18.087	829.46928	-72.4	8.7	-81.4	34.2	38.48041	0.856	-84.2	69.9	37.2	33.1	32.6	67.10145	16-17
18	-11.917	-17.565	852.31991	-60.5	10.5	-83.0	38.9	39.75572	0.816	-90.2	70.6	36.9	36.7	32.8	82.29451	17-18
19	-14.824	-16.891	890.25151	-50.8	12.8	-85.0	43.2	41.36845	0.763	-96.3	71.6	37.2	41.7	31.6	90.26366	18-19
20	-18.087	-15.988	947.30524	-43.2	15.8	-87.5	47.3	43.46092	0.694	-102.2	72.8	38.2	48.0	29.1	102.25315	19-20
21	-17.862	-19.431	894.42838	-35.3	12.5	-85.5	51.7	41.55694	0.757	-101.1	69.5	43.4	42.2	20.4	99.42672	20-21
22	-17.716	-22.503	859.60642	-25.5	9.2	-83.9	56.4	40.08784	0.805	-100.1	66.6	48.6	37.7	12.0	88.71195	21-22
23	-17.626	-25.329	839.31022	-13.8	5.8	-82.5	61.4	38.93074	0.841	-99.3	63.9	53.9	34.7	3.9	81.59995	22-23
24	-17.581	-27.989	831.31569	-0.8	2.5	-81.1	66.7	38.01335	0.864	-98.7	61.4	59.0	33.4	-3.9	76.81179	23-24
25	-14.746	-28.097	789.13618	-1.0	2.3	-80.7	63.0	36.61210	0.924	-94.4	60.8	58.6	25.3	-1.2	85.90407	24-25
26	-12.166	-28.191	760.66453	-1.4	2.1	-80.6	59.0	35.48347	0.972	-90.2	60.3	58.4	17.3	0.4	78.21421	25-26
27	-9.767	-28.276	743.74039	-2.5	2.0	-80.5	52.7	34.28051	0.992	-85.9	59.9	58.5	9.6	0.9	72.71709	26-27
28	-7.787	-28.345	737.20303	-8.0	2.0	-80.5	49.5	32.83673	0.969	-82.2	59.7	58.9	3.0	0.7	59.98742	27-28

JULY 31, 1964 13 HR 20 MIN 23 SEC 747 MS TAB NO 136 ATLAS PHOTO NO 136 POD SEQUENCE NO 278

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LONG	R	V	PTH	AZ			
				325.052			725.61038	-6.953	-28.413	2461.066	2.274	-69.385	116.056			
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.965	-19.874	799.82746	-29.4	6.3	-82.1	52.9	37.07980	0.898	-93.6	68.3	40.7	30.0	27.0	0.	0-1
2	-12.009	-23.207	770.69014	-42.0	6.4	-81.8	48.0	36.62652	0.916	-90.2	65.1	47.6	23.6	16.2	103.87906	1-2
3	-9.666	-25.873	737.76488	-39.7	3.8	-80.8	48.5	34.74602	0.985	-85.6	62.3	53.2	12.4	8.7	106.42620	2-3
4	-9.544	-23.472	752.54232	-58.1	5.5	-81.1	43.3	35.59392	0.953	-85.2	64.6	47.9	18.4	16.5	71.80510	3-4
5	-9.413	-20.908	778.49564	-67.2	7.1	-81.3	38.6	36.63459	0.911	-84.7	67.1	42.5	25.5	24.5	76.70691	4-5
6	-11.951	-20.532	798.33985	-53.2	8.5	-82.4	43.3	37.76172	0.873	-90.2	67.7	42.2	29.7	24.4	77.68431	5-6
7	-14.701	-20.058	831.58514	-42.8	10.2	-83.8	47.6	39.16461	0.823	-95.7	68.5	42.5	35.4	23.1	84.44731	6-7
8	-14.672	-22.882	801.31216	-32.0	7.6	-82.7	52.3	37.90030	0.868	-95.2	65.8	47.9	30.2	14.8	82.72275	7-8
9	-14.669	-25.501	783.86130	-17.9	5.0	-81.8	57.3	36.88693	0.901	-94.8	63.3	53.3	26.7	6.8	76.75122	8-9
10	-12.075	-25.703	754.90757	-25.0	4.3	-81.2	53.1	35.70771	0.949	-90.2	62.7	53.1	19.2	8.3	78.79951	9-10
11	-9.666	-25.873	737.76488	-39.7	3.8	-80.8	48.5	34.74602	0.985	-85.6	62.3	53.2	12.4	8.7	73.13577	10-11
12	-7.832	-28.226	726.33260	-9.9	2.0	-80.5	49.3	32.35437	0.969	-82.2	59.8	58.9	3.0	0.8	89.72074	11-12
13	-7.680	-26.000	731.19813	-68.9	3.4	-80.6	45.2	33.73525	0.991	-81.6	62.0	53.7	8.4	8.2	66.97450	12-13
14	-7.513	-23.664	745.50986	-78.7	4.8	-80.6	38.9	34.85055	0.977	-80.9	64.3	48.4	15.8	15.8	70.32286	13-14
15	-7.328	-21.175	770.53539	-82.3	6.1	-80.5	34.2	35.82871	0.935	-80.0	66.7	43.1	23.6	23.6	74.97965	14-15
16	-7.117	-18.472	808.01080	-84.2	7.4	-80.2	30.0	37.03630	0.882	-79.0	69.4	38.0	31.5	31.4	81.45964	15-16
17	-9.271	-18.115	817.51205	-72.4	8.7	-81.4	34.3	37.92570	0.856	-84.2	69.9	37.2	33.1	32.5	66.13799	16-17
18	-11.901	-17.601	840.01992	-60.5	10.5	-83.0	38.9	39.18210	0.817	-90.2	70.6	36.9	36.6	32.7	81.10365	17-18
19	-14.765	-16.939	877.30062	-50.9	12.8	-85.0	43.2	40.76677	0.764	-96.3	71.5	37.2	41.6	31.6	88.91291	18-19
20	-17.977	-16.056	933.26611	-43.3	15.7	-87.5	47.2	42.81686	0.695	-102.2	72.7	38.2	47.8	29.0	100.61172	19-20
21	-17.757	-19.444	881.28831	-35.4	12.4	-85.5	51.6	40.94633	0.758	-101.1	69.5	43.4	42.1	20.4	97.89607	20-21
22	-17.613	-22.469	846.97496	-25.6	9.1	-83.9	56.2	39.49862	0.806	-100.1	66.6	48.6	37.6	12.1	87.40943	21-22
23	-17.523	-25.252	826.89798	-13.9	5.8	-82.5	61.1	38.35486	0.841	-99.3	64.0	53.9	34.6	4.0	80.41675	22-23
24	-17.477	-27.872	818.88316	-1.0	2.6	-81.2	66.4	37.44475	0.865	-98.7	61.5	59.0	33.3	-3.8	75.68921	23-24
25	-14.688	-27.979	777.46928	-1.3	2.3	-80.8	62.7	36.07081	0.925	-94.4	60.9	58.6	25.3	-1.1	84.55844	24-25
26	-12.146	-28.073	749.47534	-1.8	2.2	-80.6	58.7	34.96158	0.972	-90.2	60.4	58.4	17.3	0.5	77.03961	25-26
27	-9.782	-28.158	732.80398	-3.2	2.1	-80.5	52.4	33.77850	0.992	-85.9	60.1	58.5	9.6	1.1	71.64655	26-27
28	-7.832	-28.226	726.33260	-9.9	2.0	-80.5	49.3	32.35437	0.969	-82.2	59.8	58.9	3.0	0.8	59.10744	27-28

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JULY 31, 1964 13 HR 20 MIN 28 SEC 867 MS

TAB NO 137

ATLAS PHOTO NO 137

POD SEQUENCE NO 280

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				319.932		714.70435	-6.995	-28.327	2450.160	2.278	-69.324	116.043				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.957	-19.891	787.88943	-29.5	6.2	-82.1	52.7	36.53376	0.898	-93.6	68.3	40.7	29.9	26.9	0.	0-
2	-11.992	-23.161	759.37784	-42.1	6.4	-81.8	47.9	36.08891	0.916	-90.2	65.2	47.6	23.6	16.3	101.99852	1-2
3	-9.683	-25.788	726.85585	-39.9	3.8	-80.9	48.4	34.23225	0.985	-85.6	62.4	53.2	12.5	8.8	104.88318	2-3
4	-9.562	-23.422	741.49544	-58.1	5.5	-81.1	43.3	35.07139	0.953	-85.2	64.7	47.9	18.4	16.5	70.76353	3-4
5	-9.434	-20.895	767.10675	-67.2	7.1	-81.3	38.6	36.09861	0.911	-84.7	67.1	42.5	25.5	24.5	75.59564	4-5
6	-11.935	-20.525	786.65833	-53.2	8.5	-82.4	43.2	37.20920	0.873	-90.2	67.7	42.2	29.7	24.4	76.54696	5-6
7	-14.643	-20.059	819.34498	-42.9	10.1	-83.8	47.5	38.58814	0.823	-95.7	68.5	42.5	35.3	23.1	83.17984	6-7
8	-14.614	-22.840	789.49120	-32.2	7.6	-82.8	52.1	37.34116	0.868	-95.2	65.8	47.9	30.2	14.9	81.51342	7-8
9	-14.611	-25.421	772.21528	-18.1	5.0	-81.8	57.1	36.33885	0.902	-94.8	63.4	53.3	26.7	6.8	75.63377	8-9
10	-12.056	-25.621	743.74510	-25.2	4.3	-81.3	52.9	35.17973	0.949	-90.2	62.8	53.1	19.2	8.3	77.61134	9-10
11	-9.683	-25.788	726.85585	-39.9	3.8	-80.9	48.4	34.23225	0.985	-85.6	62.4	53.2	12.5	8.8	72.05425	10-11
12	-7.876	-28.108	715.44942	-11.8	2.0	-80.5	49.1	31.87153	0.969	-82.2	59.9	58.9	3.1	1.0	88.40338	11-12
13	-7.726	-25.914	720.35250	-68.8	3.4	-80.6	45.1	31.24265	0.991	-81.6	62.0	53.7	8.5	8.3	65.98399	12-13
14	-7.562	-23.612	734.52938	-78.6	4.8	-80.6	38.9	34.33711	0.977	-80.9	64.3	48.4	15.9	15.9	69.29896	13-14
15	-7.379	-21.158	759.22412	-82.2	6.1	-80.5	34.3	35.30259	0.935	-80.0	66.7	43.1	23.6	23.6	73.88939	14-15
16	-7.171	-18.495	796.13221	-84.1	7.4	-80.2	30.1	36.49169	0.882	-79.0	69.3	38.0	31.4	31.3	80.25502	15-16
17	-9.294	-18.143	805.53269	-72.4	8.7	-81.4	34.3	37.36996	0.857	-84.2	69.8	37.2	33.1	32.5	65.17277	16-17
18	-11.885	-17.637	827.69747	-60.5	10.5	-83.0	38.9	38.60743	0.817	-90.2	70.6	36.9	36.6	32.7	79.91075	17-18
19	-14.706	-16.987	864.32928	-50.9	12.7	-85.0	43.2	40.16412	0.765	-96.3	71.5	37.2	41.6	31.5	87.56135	18-19
20	-17.867	-16.124	919.21365	-43.3	15.6	-87.4	47.2	42.17218	0.697	-102.2	72.6	38.2	47.7	28.9	98.97333	19-20
21	-17.551	-17.557	848.13162	-35.5	12.3	-85.5	51.5	40.33496	0.760	-101.1	69.5	43.4	42.0	20.4	96.36608	20-21
22	-17.509	-22.435	834.32756	-25.7	9.1	-84.0	50.0	38.70000	0.807	-100.1	66.4	48.6	37.6	12.1	86.10528	21-22
23	-17.420	-25.176	814.47257	-14.1	5.8	-82.6	60.9	37.77837	0.842	-99.3	64.0	53.9	34.6	4.1	79.23165	22-23
24	-17.374	-27.755	806.44183	-1.2	2.6	-81.3	66.0	36.87574	0.866	-98.7	61.6	59.0	33.2	-3.6	74.56002	23-24
25	-14.629	-27.862	765.78972	-1.5	2.4	-80.9	62.4	35.52893	0.925	-94.4	61.0	58.6	25.2	-0.9	83.21411	24-25
26	-12.126	-27.955	738.27225	-2.2	2.2	-80.7	58.4	34.43904	0.972	-90.2	60.6	58.4	17.3	0.6	75.86426	25-26
27	-9.797	-28.040	721.85387	-3.9	2.1	-80.5	52.2	33.27593	0.992	-85.9	60.2	58.5	9.6	1.2	70.57475	26-27
28	-7.876	-28.108	715.44942	-11.8	2.0	-80.5	49.1	31.87153	0.969	-82.2	59.9	58.9	3.1	1.0	58.22610	27-28

JULY 31, 1964 13 HR 20 MIN 33 SEC 987 MS

TAB NO 138

ATLAS PHOTO NO 138

POD SEQUENCE NO 282

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				314.812				703.78394	-7.038	-28.239	2439.239	2.282	-69.264	116.031		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.949	-19.908	775.93341	-29.7	6.2	-82.2	52.5	35.98765	0.898	-93.6	68.3	40.7	29.8	26.9	0.	0-1
2	-11.975	-23.112	748.06604	-42.2	6.4	-81.9	47.8	35.55133	0.916	-90.2	65.2	47.6	23.6	16.3	100.06129	1-2
3	-9.700	-25.702	715.93944	-40.2	3.8	-80.9	48.2	33.71813	0.985	-85.6	62.5	53.2	12.6	8.8	103.34218	2-3
4	-9.581	-23.370	730.44758	-58.1	5.5	-81.1	43.2	34.54880	0.953	-85.2	64.7	47.9	18.5	16.6	69.72301	3-4
5	-9.455	-20.880	755.72580	-67.1	7.1	-81.3	38.6	35.56298	0.911	-84.7	67.2	42.5	25.5	24.5	74.48769	4-5
6	-11.918	-20.515	774.98711	-53.2	8.5	-82.4	43.2	36.65717	0.873	-90.2	67.8	42.2	29.7	24.4	75.41111	5-6
7	-14.586	-20.057	807.12052	-43.0	10.1	-83.8	47.4	38.01242	0.824	-95.7	68.5	42.5	35.3	23.1	81.91573	6-7
8	-14.557	-22.797	777.67448	-32.3	7.5	-82.8	52.0	36.78221	0.868	-95.2	65.9	47.9	30.2	14.9	80.30914	7-8
9	-14.553	-25.338	760.56559	-18.4	5.0	-81.9	56.8	35.79059	0.902	-94.8	63.4	53.3	26.6	6.9	74.51826	8-9
10	-12.037	-25.536	732.57619	-25.5	4.3	-81.3	52.7	34.65145	0.949	-90.2	62.9	53.1	19.2	8.4	76.42386	9-10
11	-9.700	-25.702	715.93944	-40.2	3.8	-80.9	48.2	33.71813	0.985	-85.6	62.5	53.2	12.6	8.8	70.97225	10-11
12	-7.920	-27.987	704.55449	-13.8	2.0	-80.5	48.9	31.38831	0.969	-82.2	60.0	58.9	3.2	1.1	87.08580	11-12
13	-7.773	-25.826	709.49967	-68.7	3.4	-80.6	45.0	32.75016	0.991	-81.6	62.1	53.7	8.6	8.4	64.99316	12-13
14	-7.611	-23.557	723.54789	-78.4	4.8	-80.6	38.9	33.82361	0.977	-80.9	64.4	48.4	16.0	15.9	68.27603	13-14
15	-7.430	-21.140	747.92041	-82.1	6.2	-80.4	34.4	34.77679	0.935	-80.0	66.7	43.1	23.6	23.6	72.80228	14-15
16	-7.225	-18.516	784.27353	-84.0	7.4	-80.2	30.2	35.94794	0.882	-79.0	69.3	38.0	31.4	31.3	79.05722	15-16
17	-9.317	-18.168	793.57432	-72.3	8.7	-81.4	34.4	36.81517	0.857	-84.2	69.8	37.2	33.1	32.5	64.20929	16-17
18	-11.870	-17.671	815.40001	-60.5	10.5	-83.0	38.9	38.03392	0.817	-90.2	70.5	36.9	36.6	32.7	78.72094	17-18
19	-14.647	-17.033	851.39147	-51.0	12.6	-85.0	43.1	39.56304	0.766	-96.3	71.4	37.2	41.5	31.5	86.21599	18-19
20	-17.757	-16.188	905.21194	-43.4	15.5	-87.4	47.1	41.52983	0.699	-102.2	72.6	38.2	47.6	28.9	97.34808	19-20
21	-17.546	-19.467	855.00159	-35.6	12.3	-85.6	51.3	39.72480	0.761	-101.1	69.4	43.4	42.0	20.4	94.85198	20-21
22	-17.406	-22.399	821.69210	-25.9	9.1	-84.0	55.8	38.31924	0.808	-100.1	66.7	48.6	37.5	12.2	84.80854	21-22
23	-17.318	-25.097	802.04948	-14.3	5.8	-82.7	60.6	37.20194	0.843	-99.3	64.1	53.9	34.5	4.2	78.04967	22-23
24	-17.271	-27.635	793.99648	-1.4	2.6	-81.4	65.7	36.30650	0.867	-98.7	61.7	59.0	33.1	-3.4	73.43172	23-24
25	-14.570	-27.742	754.10095	-1.8	2.4	-81.0	62.0	34.98660	0.925	-94.4	61.1	58.6	25.1	-0.8	81.87199	24-25
26	-12.106	-27.835	727.05771	-2.6	2.2	-80.7	58.1	33.91595	0.972	-90.2	60.7	58.4	17.3	0.7	74.68883	25-26
27	-9.813	-27.919	710.89163	-4.6	2.1	-80.6	51.9	32.77298	0.992	-85.9	60.3	58.5	9.6	1.3	69.50204	26-27
28	-7.920	-27.987	704.55449	-13.8	2.0	-80.5	48.9	31.38831	0.969	-82.2	60.0	58.9	3.2	1.1	57.34395	27-28

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JULY 31, 1964 13 HR 20 MIN 39 SEC 107 MS TAB NO 139 ATLAS PHOTO NO 139 POD SEQUENCE NO 284

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				309.692			692.84930	-7.081	-28.151	2428.305	2.286	-69.202	116.018			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.941	-19.925	763.95941	-29.9	6.2	-82.2	52.4	35.44058	0.898	-93.6	68.2	40.8	29.8	26.8	0.	0-1
2	-11.957	-23.064	736.73299	-42.4	6.4	-81.9	47.6	35.01273	0.916	-90.2	65.3	47.6	23.7	16.4	98.13089	1-2
3	-9.717	-25.615	705.00559	-40.4	3.8	-80.9	48.0	33.20319	0.985	-85.6	62.5	53.2	12.6	8.9	101.79768	2-3
4	-9.600	-23.318	719.37918	-58.2	5.5	-81.1	43.2	34.02524	0.952	-85.2	64.8	47.9	18.5	16.6	68.68021	3-4
5	-9.475	-20.865	744.32187	-67.1	7.1	-81.3	38.6	35.02527	0.910	-84.7	67.2	42.5	25.5	24.5	73.37702	4-5
6	-11.902	-20.505	763.25218	-53.3	8.4	-82.4	43.1	36.10401	0.873	-90.2	67.8	42.2	29.7	24.4	74.27284	5-6
7	-14.528	-20.056	794.87321	-43.1	10.1	-83.8	47.3	37.43563	0.824	-95.7	68.5	42.5	35.3	23.1	80.65004	6-7
8	-14.500	-22.753	765.83720	-32.4	7.5	-82.9	51.8	36.22229	0.869	-95.2	65.9	47.9	30.2	15.0	79.10216	7-8
9	-14.495	-25.254	748.89880	-18.5	5.0	-82.0	56.6	35.24152	0.902	-94.8	63.5	53.3	26.6	7.0	73.40035	8-9
10	-12.019	-25.451	721.38937	-25.7	4.3	-81.3	52.5	34.12232	0.949	-90.2	63.0	53.1	19.2	8.5	75.23518	9-10
11	-9.717	-25.615	705.00559	-40.4	3.8	-80.9	48.0	33.20319	0.985	-85.6	62.5	53.2	12.6	8.9	69.88846	10-11
12	-7.965	-27.866	693.64700	-15.6	2.0	-80.5	48.8	30.90463	0.969	-82.2	60.1	58.9	3.3	1.2	85.76601	11-12
13	-7.819	-25.738	698.63058	-68.6	3.5	-80.6	45.0	32.25676	0.991	-81.6	62.2	53.7	8.7	8.5	64.00095	12-13
14	-7.659	-23.503	712.54716	-78.3	4.8	-80.5	38.9	33.30921	0.976	-80.9	64.4	48.4	16.0	16.0	67.25097	13-14
15	-7.481	-21.122	736.59518	-82.0	6.2	-80.4	34.5	34.25000	0.935	-80.0	66.8	43.1	23.6	23.6	71.71270	14-15
16	-7.280	-18.538	772.39206	-83.9	7.4	-80.2	30.4	35.40315	0.882	-79.0	69.3	38.0	31.4	31.3	77.85701	15-16
17	-9.340	-18.194	781.59158	-72.3	8.7	-81.4	34.5	36.25925	0.857	-84.2	69.8	37.2	33.0	32.5	63.24371	16-17
18	-11.854	-17.705	803.07761	-60.5	10.4	-83.0	38.9	37.45924	0.818	-90.2	70.5	36.9	36.5	32.6	64.86925	17-18
19	-14.589	-17.079	838.43036	-51.0	12.6	-85.0	43.1	38.96087	0.767	-96.3	71.4	37.2	41.4	31.5	84.86925	18-19
20	-17.648	-16.252	891.19324	-43.5	15.4	-87.4	47.0	40.88670	0.700	-102.2	72.5	38.2	47.5	28.8	95.72525	19-20
21	-17.441	-19.477	841.85270	-35.7	12.2	-85.6	51.2	39.11378	0.762	-101.1	69.4	43.4	41.9	20.4	93.33577	20-21
22	-17.303	-22.362	809.03930	-26.0	9.0	-84.1	55.6	37.72901	0.809	-100.1	66.7	48.6	37.4	12.2	76.86553	21-22
23	-17.215	-25.018	789.61251	-14.5	5.8	-82.8	60.3	36.62489	0.844	-99.3	64.2	53.9	34.4	4.4	76.86553	22-23
24	-17.168	-27.516	781.56226	-1.6	2.7	-81.6	65.3	35.73686	0.868	-98.7	61.8	59.0	33.0	-3.3	72.30211	23-24
25	-14.511	-27.622	742.39958	-2.1	2.4	-81.1	61.7	34.44369	0.926	-94.4	61.2	58.6	25.1	-0.7	80.53095	24-25
26	-12.085	-27.715	715.82935	-3.0	2.2	-80.8	57.7	33.39223	0.972	-90.2	60.8	58.4	17.3	0.9	73.51275	25-26
27	-9.828	-27.799	699.91580	-5.3	2.1	-80.6	51.7	32.26948	0.992	-85.9	60.4	58.5	9.6	1.4	68.42795	26-27
28	-7.965	-27.866	693.64700	-15.6	2.0	-80.5	48.8	30.90463	0.969	-82.2	60.1	58.9	3.3	1.2	56.46065	27-28

JULY 31, 1964 13 HR 20 MIN 44 SEC 227 MS TAB NO 140 ATLAS PHOTO NO 140 POD SEQUENCE NO 286

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				304.572	681.89981	-7.124	-28.061	2417.355	2.290	-69.140	116.005					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.933	-19.942	751.96686	-30.0	6.2	-82.3	52.2	34.89258	0.898	-93.6	68.2	40.8	29.7	26.8	0.	0-1
2	-11.940	-23.016	725.38006	-42.5	6.4	-81.9	47.5	34.47319	0.916	-90.2	65.3	47.6	23.7	16.4	96.20019	1-2
3	-9.734	-25.528	694.05455	-40.7	3.8	-80.9	47.9	32.68744	0.984	-85.6	62.6	53.2	12.7	9.0	100.25004	2-3
4	-9.619	-23.266	708.29144	-58.2	5.5	-81.1	43.1	33.50077	0.952	-85.2	64.8	47.9	18.6	16.7	67.63534	3-4
5	-9.496	-20.850	732.89736	-67.1	7.1	-81.3	38.7	34.48860	0.910	-84.7	67.2	42.5	25.6	24.5	72.26422	4-5
6	-11.885	-20.496	751.57616	-53.3	8.4	-82.4	43.1	35.54986	0.873	-90.2	67.8	42.2	29.7	24.5	73.13260	5-6
7	-14.471	-20.054	782.60590	-43.2	10.0	-83.9	47.2	36.85788	0.824	-95.7	68.5	42.5	35.2	23.1	79.38294	6-7
8	-14.442	-22.709	753.98082	-32.6	7.5	-82.9	51.6	35.66147	0.869	-95.2	65.9	47.9	30.1	15.0	77.89317	7-8
9	-14.437	-25.174	737.21524	-18.8	5.0	-82.0	56.3	34.69166	0.902	-94.8	63.6	53.3	26.6	7.1	72.28039	8-9
10	-12.000	-25.366	710.18488	-26.0	4.4	-81.4	52.3	33.59235	0.948	-90.2	63.1	53.1	19.2	8.6	74.04524	9-10
11	-9.734	-25.528	694.05455	-40.7	3.8	-80.9	47.9	32.68744	0.984	-85.6	62.6	53.2	12.7	9.0	68.80309	10-11
12	-8.009	-27.745	682.72630	-17.4	2.0	-80.5	48.6	30.42044	0.969	-82.2	60.3	58.9	3.3	1.3	84.44413	11-12
13	-7.866	-25.650	687.74548	-68.5	3.5	-80.5	44.9	31.76251	0.992	-81.6	62.3	53.7	8.8	8.6	63.00739	12-13
14	-7.708	-23.449	701.52834	-78.2	4.9	-80.5	38.9	32.79398	0.976	-80.9	64.5	48.4	16.1	16.1	66.22405	13-14
15	-7.533	-21.103	725.25069	-81.9	6.2	-80.4	34.5	33.72231	0.935	-80.0	66.8	43.1	23.7	23.6	70.62108	14-15
16	-7.334	-18.559	760.49146	-83.8	7.5	-80.1	30.5	34.85749	0.882	-79.0	69.3	38.0	31.4	31.3	76.65532	15-16
17	-9.363	-18.220	769.58835	-72.2	8.7	-81.4	34.5	35.70238	0.857	-84.2	69.8	37.2	33.0	32.5	62.27642	16-17
18	-11.838	-17.739	790.73453	-60.6	10.4	-83.0	38.9	36.88360	0.818	-90.2	70.5	36.9	36.5	32.6	76.33488	17-18
19	-14.530	-17.125	825.45061	-51.0	12.5	-85.0	43.0	38.35783	0.767	-96.3	71.3	37.2	41.4	31.4	83.52184	18-19
20	-17.538	-16.317	877.16309	-43.5	15.3	-87.4	46.9	40.24304	0.702	-102.2	72.4	38.2	47.4	28.8	94.10568	19-20
21	-17.335	-19.467	828.68825	-35.8	12.1	-85.6	51.1	38.50203	0.763	-101.1	69.4	43.4	41.8	20.4	91.82435	20-21
22	-17.199	-22.326	796.37095	-26.2	9.0	-84.2	55.4	37.13806	0.810	-100.1	66.7	48.6	37.3	12.3	82.20949	21-22
23	-17.112	-24.939	777.16212	-14.7	5.8	-82.9	60.0	36.04721	0.845	-99.3	64.2	53.9	34.3	4.5	75.67965	22-23
24	-17.064	-27.397	769.07841	-1.8	2.7	-81.7	64.9	35.16677	0.869	-98.7	61.9	59.0	32.9	-3.1	71.17134	23-24
25	-14.452	-27.503	730.68490	-2.4	2.5	-81.2	61.3	33.90016	0.926	-94.4	61.3	58.6	25.0	-0.5	79.19091	24-25
26	-12.065	-27.595	704.58648	-3.4	2.3	-80.8	57.4	32.86782	0.972	-90.2	60.9	58.4	17.3	1.0	72.33602	25-26
27	-9.843	-27.679	688.92574	-6.0	2.1	-80.6	51.4	31.76539	0.992	-85.9	60.5	58.5	9.7	1.5	67.35252	26-27
28	-8.009	-27.745	682.72630	-17.4	2.0	-80.5	48.6	30.42044	0.969	-82.2	60.3	58.9	3.3	1.3	55.57610	27-28

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JULY 31, 1964 13 HR 20 MIN 49 SEC 347 MS

TAB NO 141

ATLAS PHOTO NO 141

POD SEQUENCE NO 288

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ		
				299.452			670.93561	-7.167	-27.971	2406.391	2.294	-69.078	115.992		
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.925	-19.959	739.95585	-30.2	6.2	-82.3	52.0	34.34447	0.898	-93.6	68.2	40.8	29.7	26.7	0
2	-11.922	-22.964	714.02775	-42.6	6.4	-81.9	47.4	33.93368	0.916	-90.2	65.4	47.6	23.7	16.5	94.19838
3	-9.751	-25.439	683.09614	-40.9	3.9	-80.9	47.7	32.17135	0.984	-85.6	62.7	53.2	12.8	9.1	98.70464
4	-9.637	-23.211	697.20380	-58.2	5.5	-81.1	43.0	32.97630	0.952	-85.2	64.9	47.8	18.7	16.8	66.59188
5	-9.517	-20.832	721.48315	-67.1	7.2	-81.3	38.7	33.95140	0.910	-84.7	67.2	42.5	25.6	24.5	71.15535
6	-11.869	-20.484	739.87180	-53.4	8.4	-82.4	43.0	34.99626	0.873	-90.2	67.8	42.2	29.7	24.5	71.99369
7	-14.413	-20.049	770.35455	-43.3	10.0	-83.9	47.1	36.28090	0.825	-95.7	68.5	42.5	35.2	23.1	78.11879
8	-14.384	-22.663	742.12769	-32.8	7.5	-82.9	51.4	35.10080	0.869	-95.2	66.0	47.9	30.1	15.1	76.68971
9	-14.379	-25.089	725.52589	-19.1	5.0	-82.1	56.1	34.14152	0.903	-94.8	63.6	53.3	26.6	7.2	71.16251
10	-11.981	-25.279	698.97300	-26.3	8.4	-81.4	52.1	33.06203	0.948	-90.2	63.1	53.1	19.3	8.7	72.85541
11	-9.751	-25.439	683.09614	-40.9	3.9	-80.9	47.7	32.17135	0.984	-85.6	62.7	53.2	12.8	9.1	67.71695
12	-8.054	-27.622	671.79370	-19.2	2.1	-80.5	48.4	29.93589	0.969	-82.2	60.4	58.9	3.5	1.5	83.12190
13	-7.912	-25.560	676.85397	-68.5	3.5	-80.5	44.8	31.26848	0.992	-81.6	62.4	53.7	8.9	8.7	62.01367
14	-7.756	-23.392	690.51041	-78.0	4.9	-80.5	38.9	32.27876	0.976	-80.9	64.5	48.4	16.2	16.1	65.19848
15	-7.584	-21.083	713.91689	-81.8	6.2	-80.4	34.6	33.19509	0.934	-80.0	66.8	43.1	23.7	23.7	69.53331
16	-7.388	-18.578	748.61551	-83.7	7.5	-80.1	30.6	34.31291	0.882	-79.0	69.3	38.0	31.4	31.3	75.46142
17	-9.385	-18.243	757.60999	-72.2	8.7	-81.3	34.6	35.14664	0.857	-84.2	69.7	37.2	33.0	32.4	61.31129
18	-11.822	-17.770	778.41927	-60.6	10.4	-83.0	38.9	36.30925	0.819	-90.2	70.4	36.9	36.5	32.6	75.14411
19	-14.471	-17.167	812.50603	-51.1	12.5	-85.0	43.0	37.75643	0.768	-96.3	71.3	37.2	41.3	31.4	82.18027
20	-17.429	-16.377	863.18347	-43.6	15.2	-87.4	46.8	39.60171	0.703	-102.2	72.4	38.2	47.2	28.7	92.49808
21	-17.230	-19.444	815.54910	-35.9	12.1	-85.6	50.9	37.89145	0.764	-101.1	69.4	43.3	41.7	20.4	90.32766
22	-17.096	-22.286	783.71200	-26.3	9.0	-84.2	55.2	36.5752	0.810	-100.1	66.7	48.6	37.3	12.4	80.91706
23	-17.009	-24.857	764.71042	-14.9	5.8	-82.9	59.8	35.46942	0.845	-99.3	64.3	53.8	34.2	4.0	74.76555
24	-16.961	-27.275	756.60582	-2.1	2.7	-81.8	64.6	34.59623	0.870	-98.7	62.0	59.0	32.8	-3.0	70.04124
25	-14.392	-27.380	693.33024	-2.7	2.5	-81.2	61.0	33.35603	0.927	-94.4	61.5	58.6	25.0	-0.4	77.85192
26	-12.045	-27.473	693.33024	-3.9	2.3	-80.9	57.1	32.34279	0.972	-90.2	61.0	58.4	17.3	1.1	71.15847
27	-9.858	-27.556	677.92265	-6.8	2.2	-80.6	51.1	31.26085	0.992	-85.9	60.7	58.5	9.7	1.7	66.27591
28	-8.054	-27.622	671.79370	-19.2	2.1	-80.5	48.4	29.93589	0.969	-82.2	60.4	58.9	3.5	1.5	54.69038

JULY 31, 1964 13 HR 20 MIN 54 SEC 467 MS

TAB NO 142

ATLAS PHOTO NO 142

POD SEQUENCE NO 290

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
PHOTO DATA				294.333				659.95679	-7.211	-27.880	2395.412	2.298	-69.015	115.978		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.917	-19.976	727.92641	-30.4	6.2	-82.4	51.8	33.79532	0.898	-93.6	68.2	40.9	29.6	26.7	0	0
2	-11.904	-22.914	702.65278	-42.8	6.4	-82.0	47.2	33.39309	0.915	-90.2	65.4	47.6	23.7	16.6	92.20678	1
3	-9.768	-25.350	672.11945	-41.2	3.9	-80.9	47.6	31.65439	0.984	-85.6	62.8	53.2	12.8	9.2	97.15524	2
4	-9.656	-23.157	686.09425	-58.3	5.5	-81.1	42.9	32.45079	0.951	-85.2	64.9	47.8	18.7	16.8	65.54591	3
5	-9.537	-20.815	710.04399	-67.1	7.2	-81.2	38.6	33.41303	0.910	-84.7	67.2	42.5	25.6	24.6	70.04344	4
6	-11.852	-20.472	728.14169	-53.5	8.4	-82.5	42.9	34.44143	0.873	-90.2	67.8	42.2	29.7	24.5	70.85213	5
7	-14.355	-20.045	758.07815	-43.4	10.0	-83.9	47.0	35.70273	0.825	-95.7	68.5	42.5	35.1	23.2	76.85291	6
8	-14.327	-22.617	730.25249	-32.9	7.5	-83.0	51.2	34.53908	0.869	-95.2	66.0	47.9	30.1	15.2	75.48315	7
9	-14.321	-25.004	713.81850	-19.3	5.0	-82.1	55.8	33.59054	0.903	-94.8	63.7	53.3	26.5	7.3	70.04202	8
10	-11.962	-25.191	687.74229	-26.6	4.4	-81.4	51.8	32.53082	0.948	-90.2	63.2	53.0	19.3	8.8	71.66408	9
11	-9.768	-25.350	672.11945	-41.2	3.9	-80.9	47.6	31.65439	0.984	-85.6	62.8	53.2	12.8	9.2	66.62900	10
12	-8.098	-27.499	660.84813	-20.9	2.1	-80.5	48.2	29.45084	0.969	-82.2	60.5	58.9	3.5	1.6	81.79745	11
13	-7.958	-25.469	665.94536	-68.4	3.5	-80.5	44.7	30.77346	0.992	-81.6	62.5	53.7	9.0	8.8	61.01846	12
14	-7.805	-23.336	679.47192	-77.9	4.9	-80.5	38.9	31.76259	0.975	-80.9	64.6	48.4	16.2	16.2	64.17062	13
15	-7.635	-21.062	702.55968	-81.7	6.2	-80.3	34.6	32.66678	0.934	-80.0	66.8	43.1	23.7	23.7	68.44269	14
16	-7.442	-18.597	736.71416	-83.6	7.5	-80.1	30.7	33.76717	0.883	-79.0	69.3	38.0	31.4	31.3	74.26476	15
17	-9.408	-18.267	745.60461	-72.2	8.7	-81.3	34.6	34.58965	0.857	-84.2	69.7	37.2	33.0	32.4	60.34364	16
18	-11.806	-17.801	766.07628	-60.6	10.4	-83.0	38.9	35.73360	0.819	-90.2	70.4	36.9	36.4	32.6	73.95061	17
19	-14.412	-17.210	799.53503	-51.1	12.4	-85.0	42.9	37.15380	0.769	-96.3	71.2	37.2	41.2	31.3	80.83701	18
20	-17.319	-16.437	849.18309	-43.7	15.1	-87.4	46.7	38.95941	0.705	-102.2	72.3	38.2	47.1	28.7	90.89227	19
21	-17.124	-19.501	802.38862	-36.0	12.0	-85.7	50.8	37.27988	0.765	-101.1	69.4	43.3	41.6	20.4	88.82927	20
22	-16.992	-22.247	771.03410	-26.5	8.9	-84.3	55.0	35.95611	0.811	-100.1	66.7	48.6	37.2	12.5	79.62199	21
23	-16.906	-24.776	752.24387	-15.1	5.9	-83.0	59.5	34.89096	0.846	-99.3	64.3	53.8	34.2	4.7	73.31188	22
24	-16.857	-27.153	744.12399	-2.3	2.8	-81.9	64.2	34.02528	0.871	-98.7	62.1	59.0	32.7	-2.8	68.90975	23
25	-14.333	-27.258	707.21786	-4.3	2.5	-81.3	60.6	32.81131	0.927	-94.4	61.6	58.6	24.9	-0.2	76.51412	24
26	-12.024	-27.350	682.05975	-4.3	2.3	-80.9	56.8	31.81710	0.972	-90.2	61.1	58.4	17.2	1.3	69.98025	25
27	-9.873	-27.433	666.90555	-7.5	2.2	-80.6	50.9	30.75572	0.992	-85.9	60.8	58.5	9.7	1.8	65.19784	26
28	-8.098	-27.499	660.84813	-20.9	2.1	-80.5	48.2	29.45084	0.969	-82.2	60.5	58.9	3.5	1.6	53.80351	27

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TAB NO 143

ATLAS PHOTO NO 143

POD SEQUENCE NO 292

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				289.213		648.96298	-7.256	-27.789	2384.418	2.302	-68.952	115.965				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.909	-19.993	715.87820	-30.6	6.2	-82.4	51.6	33.24505	0.898	-93.6	68.2	40.9	29.6	26.6	0.	0-1
2	-11.886	-22.864	691.25236	-42.9	6.4	-82.0	47.1	32.85130	0.915	-90.2	65.5	47.6	23.8	16.6	90.23682	1-2
3	-9.784	-25.261	661.12283	-41.5	3.9	-80.9	47.4	31.13649	0.984	-85.6	62.9	53.2	12.9	9.3	95.60138	2-3
4	-9.675	-23.104	674.95966	-58.3	5.6	-81.1	42.9	31.92411	0.951	-85.2	65.0	47.8	18.8	16.9	64.49690	3-4
5	-9.557	-20.799	698.57498	-67.0	7.2	-81.2	38.6	32.87326	0.910	-84.7	67.3	42.4	25.7	24.6	68.92751	4-5
6	-11.835	-20.461	716.38116	-53.5	8.4	-82.5	42.9	33.88517	0.873	-90.2	67.8	42.2	29.7	24.5	69.70778	5-6
7	-14.297	-20.042	745.77208	-43.4	10.0	-83.9	46.9	35.12316	0.825	-95.7	68.5	42.5	35.1	23.2	75.58464	6-7
8	-14.269	-22.572	718.35274	-33.1	7.5	-83.0	51.1	31.97420	0.857	-92.2	66.0	47.9	30.1	15.2	74.27233	7-8
9	-14.262	-24.970	702.05251	-19.5	3.0	-82.2	55.5	33.03867	0.903	-94.8	63.8	53.3	26.5	7.5	68.91832	8-9
10	-11.943	-25.105	676.49157	-26.8	4.4	-81.5	51.6	31.99867	0.948	-90.2	63.3	53.0	19.3	8.9	70.47172	9-10
11	-9.784	-25.261	661.12283	-41.5	3.9	-80.9	47.4	31.13649	0.984	-85.6	62.9	53.2	12.9	9.3	65.53914	10-11
12	-8.143	-27.376	649.88902	-22.5	2.1	-80.5	48.0	28.96526	0.969	-82.2	60.7	58.9	3.6	1.7	80.47042	11-12
13	-8.005	-25.379	655.01775	-68.3	3.5	-80.5	44.6	30.27728	0.993	-81.6	62.6	53.7	9.1	8.9	60.02155	12-13
14	-7.854	-23.280	668.40940	-77.8	4.9	-80.4	38.9	31.24531	0.975	-80.9	64.7	48.4	16.3	16.3	63.13986	13-14
15	-7.686	-21.042	691.17388	-81.5	6.3	-80.3	34.7	32.13717	0.934	-80.0	66.9	43.1	23.7	23.7	67.34827	14-15
16	-7.497	-18.616	724.78004	-83.5	7.5	-80.0	30.8	33.21995	0.883	-79.0	69.2	38.0	31.4	31.3	73.06363	15-16
17	-9.430	-18.292	733.56499	-72.1	8.7	-81.3	34.7	34.03107	0.858	-84.2	69.7	37.2	33.0	32.4	59.37335	16-17
18	-11.790	-17.833	753.69842	-60.6	10.4	-83.0	38.9	35.15632	0.819	-90.2	70.4	36.8	36.4	32.5	72.75383	17-18
19	-14.353	-17.254	786.53033	-51.2	12.4	-85.0	42.9	36.54959	0.770	-96.3	71.2	37.2	41.2	31.3	79.49135	18-19
20	-17.209	-16.499	835.15430	-43.7	15.0	-87.4	46.6	38.31581	0.706	-102.2	72.2	38.2	47.0	28.7	89.28723	19-20
21	-17.019	-19.509	789.20220	-36.1	11.9	-85.7	50.6	36.66711	0.766	-101.1	69.3	43.3	41.5	20.5	87.32774	20-21
22	-16.889	-22.209	758.33502	-26.6	8.9	-84.3	54.8	35.36371	0.812	-100.1	66.8	48.6	37.1	12.5	78.32305	21-22
23	-16.803	-24.695	739.76220	-15.3	5.9	-83.1	59.2	34.31181	0.847	-99.3	64.4	53.8	34.1	4.8	72.12372	22-23
24	-16.753	-27.032	731.63430	-2.6	2.8	-82.0	63.8	33.45398	0.872	-98.7	62.2	59.0	32.6	-2.6	67.77666	23-24
25	-14.274	-27.137	695.46560	-3.3	2.6	-81.4	60.3	32.26602	0.927	-94.4	61.7	58.5	24.9	-0.1	75.17779	24-25
26	-12.004	-27.228	670.77527	-4.8	2.4	-81.0	56.5	31.29075	0.972	-90.2	61.2	58.4	17.2	1.4	68.80157	25-26
27	-9.888	-27.310	655.87424	-8.3	2.2	-80.7	50.6	30.25002	0.992	-85.9	60.9	58.5	9.8	1.9	64.11861	26-27
28	-8.143	-27.376	649.88902	-22.5	2.1	-80.5	48.0	28.96526	0.969	-82.2	60.7	58.9	3.6	1.7	52.91558	27-28

TAB NO 144

ATLAS PHOTO NO 144

POD SEQUENCE NO 294

JULY 31, 1964 13 HR 21 MIN 4 SEC 707 MS

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				284.093				637.95435	-7.300	-27.696	2373.410	2.306	-68.888	115.951		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.901	-20.009	703.81130	-30.8	6.2	-82.5	51.4	32.69336	0.898	-93.6	68.2	40.9	29.5	26.6	0.	0-1
2	-11.869	-22.816	679.81618	-43.0	6.4	-82.0	47.0	32.30780	0.915	-90.2	65.5	47.6	23.8	16.7	88.33904	1-2
3	-9.802	-25.175	650.10141	-41.7	3.9	-80.9	47.3	30.61743	0.981	-85.6	63.0	53.2	13.0	9.4	94.04032	2-3
4	-9.694	-23.052	663.78835	-58.4	5.6	-81.1	42.8	31.39569	0.951	-85.2	65.1	47.8	18.8	16.9	63.44263	3-4
5	-9.579	-20.785	687.05699	-67.0	7.2	-81.2	38.7	32.33117	0.909	-84.7	67.3	42.4	25.7	24.6	67.80347	4-5
6	-11.818	-20.452	704.57153	-53.6	8.4	-82.5	42.8	33.32659	0.873	-90.2	67.8	42.2	29.7	24.5	68.55902	5-6
7	-14.239	-20.041	733.41840	-43.5	9.9	-83.9	46.8	34.54135	0.826	-95.7	68.5	42.5	35.1	23.2	74.31261	6-7
8	-14.211	-22.529	706.41941	-33.2	7.5	-83.1	50.9	33.41175	0.870	-95.2	66.1	47.9	30.1	15.3	73.05284	7-8
9	-14.204	-24.838	690.34589	-19.8	5.0	-82.3	55.3	32.48586	0.903	-94.8	63.9	53.2	26.5	7.6	67.78912	8-9
10	-11.924	-25.020	665.21755	-27.1	4.4	-81.5	51.4	31.46541	0.948	-90.2	63.4	53.0	19.3	9.0	69.27851	9-10
11	-9.802	-25.175	650.10141	-41.7	3.9	-80.9	47.3	30.61743	0.983	-85.6	63.0	53.2	13.0	9.4	64.44743	10-11
12	-8.188	-27.255	638.91598	-23.9	2.1	-80.4	47.8	28.47908	0.969	-82.2	60.8	58.9	3.7	1.8	79.13977	11-12
13	-8.052	-25.291	644.06479	-68.2	3.6	-80.5	44.6	29.77924	0.993	-81.6	62.7	53.7	9.2	9.0	59.02207	12-13
14	-7.903	-23.226	657.31007	-77.6	4.9	-80.4	38.9	30.72633	0.975	-80.9	64.7	48.4	16.3	16.3	62.10394	13-14
15	-7.738	-21.025	679.73887	-81.4	6.3	-80.3	34.8	31.60529	0.934	-80.0	66.9	43.1	23.8	23.8	66.24593	14-15
16	-7.552	-18.639	712.78286	-83.4	7.6	-80.0	31.0	32.66988	0.883	-79.0	69.2	38.0	31.3	31.3	71.85159	15-16
17	-9.453	-18.319	721.46168	-72.1	8.8	-81.3	34.8	33.46956	0.858	-84.2	69.7	37.2	33.0	32.4	58.39781	16-17
18	-11.774	-17.869	741.25651	-60.6	10.4	-83.0	38.9	34.57605	0.820	-90.2	70.3	36.8	36.4	32.5	71.55124	17-18
19	-14.294	-17.300	773.46246	-51.2	12.4	-85.0	42.8	35.94244	0.770	-96.3	71.1	37.2	41.1	31.3	78.14075	18-19
20	-17.100	-16.563	821.06636	-43.8	14.9	-87.4	46.5	37.66949	0.708	-102.2	72.1	38.2	46.9	28.6	87.67996	19-20
21	-16.913	-19.519	775.97227	-36.2	11.9	-85.7	50.5	36.05233	0.767	-101.1	69.3	43.3	41.4	20.5	85.81405	20-21
22	-16.785	-22.173	745.60722	-26.8	8.9	-84.4	54.6	34.77001	0.813	-100.1	66.8	48.6	37.1	12.6	77.01523	21-22
23	-16.701	-24.617	727.26618	-15.5	5.9	-83.2	58.9	33.73204	0.848	-99.3	64.5	53.8	34.0	5.0	70.93003	22-23
24	-16.651	-26.913	719.14505	-2.8	2.9	-82.1	63.4	32.88275	0.873	-98.7	62.3	59.0	32.5	-2.5	66.64148	23-24
25	-14.215	-27.017	683.70650	-3.6	2.6	-81.5	59.9	31.72042	0.928	-94.4	61.8	58.5	24.8	0.1	73.84476	24-25
26	-11.984	-27.108	659.47991	-5.2	2.4	-81.0	56.1	30.76388	0.972	-90.2	61.4	58.4	17.2	1.5	67.62354	25-26
27	-9.904	-27.190	644.82988	-9.0	2.2	-80.7	50.4	29.74384	0.993	-85.9	61.0	58.5	9.8	2.1	63.03879	26-27
28	-8.188	-27.255	638.91598	-23.9	2.1	-80.4	47.8	28.47908	0.969	-82.2	60.8	58.9	3.7	1.8	52.02659	27-28

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JULY 31, 1964 13 HR 21 MIN 9 SEC 827 MS

TAB NO 145

ATLAS PHOTO NO 145

POD SEQUENCE NO 296

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				278.973		626.93048	-7.346	-27.603	2362.386	2.311	-68.823	115.937				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.893	-20.026	691.72535	-31.0	6.2	-82.5	51.2	32.14059	0.898	-93.6	68.1	41.0	29.5	26.5	0.	0-1
2	-11.851	-22.768	668.35665	-43.1	6.4	-82.0	46.9	31.76319	0.915	-90.2	65.6	47.6	23.8	16.7	86.44936	1-2
3	-9.819	-25.088	639.06075	-41.9	3.9	-80.9	47.1	30.09745	0.983	-85.6	63.1	53.2	13.1	9.5	92.47537	2-3
4	-9.713	-23.001	652.59454	-58.4	5.6	-81.1	42.7	30.86621	0.951	-85.2	65.1	47.8	18.9	17.0	62.38584	3-4
5	-9.600	-20.771	675.51318	-67.0	7.2	-81.2	38.7	31.78791	0.909	-84.7	67.3	42.4	25.7	24.6	66.67647	4-5
6	-11.802	-20.444	692.73598	-53.6	8.4	-82.5	42.8	32.76678	0.873	-90.2	67.8	42.2	29.7	24.5	67.40763	5-6
7	-14.181	-20.040	721.03947	-43.6	9.9	-84.0	46.7	33.95835	0.826	-95.7	68.5	42.5	35.0	23.2	73.03884	6-7
8	-14.154	-22.486	694.46326	-33.3	7.5	-83.1	50.7	32.84622	0.870	-95.2	66.1	47.9	30.0	15.3	71.83035	7-8
9	-14.146	-24.756	678.58020	-20.0	5.1	-82.3	55.0	31.93215	0.903	-94.8	63.9	53.2	26.5	7.6	66.65727	8-9
10	-11.906	-24.936	653.92359	-27.4	4.4	-81.6	51.2	30.93121	0.948	-90.2	63.5	53.0	19.4	9.1	68.08389	9-10
11	-9.819	-25.088	639.06075	-41.9	3.9	-80.9	47.1	30.09745	0.983	-85.6	63.1	53.2	13.1	9.5	63.35380	10-11
12	-8.233	-27.134	627.92873	-25.3	2.1	-80.4	47.6	27.99232	0.970	-82.2	60.9	58.9	3.8	2.0	77.80661	11-12
13	-8.099	-25.203	633.09386	-68.1	3.6	-80.5	44.5	29.28017	0.993	-81.6	62.8	53.7	9.3	9.1	58.02101	12-13
14	-7.952	-23.173	646.18967	-77.5	5.0	-80.4	38.9	30.20636	0.975	-80.9	64.8	48.4	16.4	16.4	61.05568	13-14
15	-7.790	-21.008	668.28046	-81.3	6.3	-80.3	34.9	31.07234	0.934	-80.0	66.9	43.1	23.8	23.8	65.14088	14-15
16	-7.607	-18.662	700.76094	-83.3	7.6	-80.0	31.1	32.11868	0.883	-79.0	69.2	38.0	31.3	31.2	70.63697	15-16
17	-9.477	-18.347	709.33186	-72.0	8.8	-81.3	34.8	32.90681	0.858	-84.2	69.7	37.2	32.9	32.4	57.42005	16-17
18	-11.758	-17.904	728.78739	-60.6	10.4	-83.0	38.9	33.99450	0.820	-90.2	70.3	36.8	36.3	32.5	70.34594	17-18
19	-14.234	-17.348	706.36874	-51.3	12.3	-84.9	42.8	35.33407	0.771	-96.3	71.1	37.2	41.0	31.2	76.78859	18-19
20	-16.990	-16.628	806.95836	-43.9	14.8	-87.3	46.5	37.02225	0.709	-102.2	72.1	38.2	46.8	28.5	86.07446	19-20
21	-16.808	-19.530	762.72080	-36.3	11.8	-85.7	50.3	35.43656	0.768	-101.1	69.3	43.3	41.4	20.5	84.29960	20-21
22	-16.682	-22.131	732.87921	-20.9	5.0	-81.1	51.4	34.17539	0.813	-100.1	66.8	48.6	37.0	12.7	75.70498	21-22
23	-16.598	-24.538	714.75386	-15.6	5.9	-83.3	58.6	33.15152	0.848	-99.3	64.5	53.8	33.9	5.1	69.13388	22-23
24	-16.548	-26.794	706.64448	-3.0	2.9	-82.2	63.1	32.31100	0.874	-98.6	62.4	59.0	32.5	-2.3	65.50467	23-24
25	-14.156	-26.898	671.93266	-3.9	2.6	-81.6	59.6	31.17414	0.928	-94.4	61.9	58.5	24.8	0.2	72.51240	24-25
26	-11.964	-26.988	648.16882	-5.6	2.4	-81.1	55.8	30.23628	0.972	-90.2	61.5	58.4	17.2	1.7	66.44463	25-26
27	-9.920	-27.069	633.77016	-9.7	2.3	-80.7	50.1	29.23698	0.993	-85.9	61.1	58.5	9.8	2.2	61.95741	26-27
28	-8.233	-27.134	627.92873	-25.3	2.1	-80.4	47.6	27.99232	0.970	-82.2	60.9	58.9	3.8	2.0	51.13635	27-28

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TAB NO 146

ATLAS PHOTO NO 146

POD SEQUENCE NO 298

TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA					273.853		615.89142	-7.391	-27.508	2351.347	2.315	-68.758	115.923			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.886	-20.042	679.62028	-31.1	6.2	-82.5	51.0	31.58681	0.898	-93.6	68.1	41.0	29.4	26.5	0.	0-1
2	-11.834	-22.720	656.87527	-43.3	6.4	-82.0	46.7	31.21755	0.915	-90.2	65.6	47.6	23.8	16.8	84.56295	1-2
3	-9.837	-25.001	628.00145	-42.1	4.0	-80.9	47.0	29.57660	0.983	-85.6	63.2	53.2	13.1	9.6	90.90684	2-3
4	-9.732	-22.950	641.37959	-58.4	5.6	-81.1	42.7	30.33573	0.950	-85.2	65.2	47.8	18.9	17.1	61.32679	3-4
5	-9.621	-20.757	663.94688	-66.9	7.2	-81.2	38.7	31.24357	0.909	-84.7	67.3	42.4	25.7	24.7	65.54696	4-5
6	-11.785	-20.436	680.87688	-53.6	8.4	-82.5	42.7	32.20585	0.873	-90.2	67.8	42.2	29.7	24.6	66.25391	5-6
7	-14.123	-20.040	708.63792	-43.7	9.9	-84.0	46.6	33.37429	0.827	-95.7	68.5	42.5	35.0	23.2	71.76341	6-7
8	-14.096	-22.443	682.48591	-33.5	7.5	-83.2	50.6	32.27968	0.870	-95.2	66.1	47.9	30.0	15.4	70.60543	7-8
9	-14.088	-24.674	666.79606	-20.2	5.1	-82.4	54.8	31.37757	0.904	-94.8	64.0	53.2	26.4	7.7	65.52304	8-9
10	-11.887	-24.851	642.61045	-27.6	4.5	-81.6	51.0	30.39610	0.948	-90.2	63.5	53.0	19.4	9.2	66.88787	9-10
11	-9.837	-25.001	628.00145	-42.1	4.0	-80.9	47.0	29.57660	0.983	-85.6	63.2	53.2	13.1	9.6	62.25818	10-11
12	-8.278	-27.013	616.92735	-26.6	2.2	-80.4	47.5	27.50497	0.970	-82.2	61.0	58.9	3.9	2.1	76.47115	11-12
13	-8.146	-25.115	622.10561	-68.0	3.6	-80.4	44.4	28.78016	0.993	-81.6	62.9	53.7	9.4	9.2	57.01843	12-13
14	-8.002	-23.119	635.04949	-77.4	5.0	-80.4	38.9	29.68548	0.974	-80.9	64.8	48.4	16.5	16.4	60.02530	13-14
15	-7.842	-20.991	656.80067	-81.2	6.3	-80.2	34.9	30.53840	0.933	-80.0	66.9	43.1	23.8	23.8	64.03351	14-15
16	-7.662	-18.685	688.71729	-83.2	7.6	-80.0	31.2	31.56649	0.883	-79.0	69.2	37.9	31.3	31.2	69.42045	15-16
17	-9.500	-18.375	697.17877	-72.0	8.8	-81.3	34.9	32.34299	0.858	-84.2	69.6	37.2	32.9	32.3	56.44021	16-17
18	-11.742	-17.940	716.29457	-60.6	10.3	-83.0	38.9	33.41185	0.820	-90.2	70.3	36.8	36.3	32.4	69.13850	17-18
19	-14.175	-17.395	747.25308	-51.3	12.3	-84.9	42.7	34.72469	0.772	-96.3	71.0	37.2	41.0	31.2	75.43507	18-19
20	-16.880	-16.692	792.83492	-43.9	14.7	-87.3	46.4	36.37430	0.711	-102.2	72.0	38.2	46.7	28.5	84.47147	19-20
21	-16.702	-19.541	749.45078	-36.4	11.8	-85.8	50.2	34.81993	0.769	-101.1	69.3	43.3	41.3	20.5	82.78556	20-21
22	-16.578	-22.101	720.09397	-27.0	8.8	-84.5	54.1	33.57994	0.814	-100.1	66.8	48.6	36.9	12.7	74.39294	21-22
23	-16.495	-24.460	702.22620	-15.8	5.9	-83.4	58.3	32.57029	0.849	-99.3	64.6	53.8	33.9	5.2	68.53568	22-23
24	-16.445	-26.675	694.13284	-3.3	2.9	-82.3	62.7	31.73875	0.875	-98.6	62.5	59.0	32.4	-2.2	64.36641	23-24
25	-14.097	-26.778	660.14426	-4.2	2.6	-81.6	59.2	30.62719	0.929	-94.4	62.0	58.5	24.7	0.3	71.18093	24-25
26	-11.944	-26.868	636.84212	-6.0	2.4	-81.1	55.5	29.70794	0.972	-90.2	61.6	58.4	17.2	1.8	65.26476	25-26
27	-9.936	-26.949	622.69517	-10.3	2.3	-80.7	49.9	28.72943	0.993	-85.9	61.3	58.5	9.9	2.3	60.87466	26-27
28	-8.278	-27.013	616.92735	-26.6	2.2	-80.4	47.5	27.50497	0.970	-82.2	61.0	58.9	3.9	2.1	50.24475	27-28

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JULY 31, 1964 13 HR 21 MIN 20 SEC 66 MS TAB NO 147 ATLAS PHOTO NO 147 POD SEQUENCE NO 300

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LUN		R		V		PTH		AZ	
				268.733		604.83707		-7.437		-27.413		2340.292		2.319		-68.693		115.909	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-10.878	-20.058	667.49597	-31.3	6.2	-82.6	50.8	31.03216	0.898	-93.6	68.1	41.0	29.3	26.4	0.	0-1			
2	-11.816	-22.672	645.37569	-43.4	6.4	-82.1	46.6	30.67104	0.915	-90.2	65.7	47.6	23.9	16.8	82.66830	1-2			
3	-9.854	-24.914	616.92530	-42.4	4.0	-80.9	46.8	29.05496	0.982	-85.6	63.2	53.2	13.2	9.7	89.33581	2-3			
4	-9.751	-22.898	630.14686	-58.5	5.6	-81.1	42.6	29.80441	0.950	-85.2	65.2	47.8	19.0	17.1	60.26603	3-4			
5	-9.642	-20.743	652.36306	-66.9	7.2	-81.2	38.7	30.69841	0.909	-84.7	67.3	42.4	25.7	24.7	64.41600	4-5			
6	-11.768	-20.427	668.99997	-53.7	8.4	-82.5	42.7	31.64408	0.873	-90.2	67.8	42.2	29.7	24.6	65.09857	5-6			
7	-14.064	-20.039	696.22014	-43.8	9.8	-84.0	46.4	32.78946	0.827	-95.7	68.5	42.5	35.0	23.2	70.48714	6-7			
8	-14.038	-22.400	670.49149	-33.6	7.5	-83.2	50.4	31.71234	0.870	-95.2	66.2	47.9	30.0	15.4	69.37940	7-8			
9	-14.030	-24.591	654.99566	-20.4	5.1	-82.4	54.5	30.82722	0.904	-94.8	64.1	53.2	26.4	7.6	64.38720	8-9			
10	-11.365	-24.766	631.28000	-27.9	4.5	-81.6	50.8	29.86017	0.947	-90.2	63.6	53.0	19.4	9.3	65.69071	9-10			
11	-9.854	-24.914	616.92530	-42.4	4.0	-80.9	46.8	29.05496	0.982	-85.6	63.2	53.2	13.2	9.7	61.16097	10-11			
12	-8.323	-26.891	605.91210	-27.8	2.2	-80.4	47.3	27.01707	0.970	-82.2	61.1	58.9	4.0	2.2	75.13367	11-12			
13	-8.193	-25.027	611.10168	-67.9	3.6	-80.4	44.4	28.27937	0.994	-81.6	63.0	53.7	9.5	9.3	56.01450	12-13			
14	-8.051	-23.065	623.89278	-77.2	5.0	-80.4	38.9	29.16382	0.974	-80.9	64.9	48.4	16.5	16.5	58.98337	13-14			
15	-7.894	-20.974	645.30460	-81.1	6.4	-80.2	35.0	30.00370	0.933	-80.0	66.9	43.1	23.8	23.8	62.92482	14-15			
16	-7.717	-18.708	676.65934	-83.1	7.6	-79.9	31.4	31.01385	0.883	-79.0	69.2	37.9	31.3	31.2	68.20358	15-16			
17	-9.523	-18.402	685.01022	-71.9	8.8	-81.3	35.0	31.77844	0.858	-84.2	69.6	37.2	32.9	32.3	55.45909	16-17			
18	-11.726	-17.975	703.78643	-60.6	10.3	-83.0	38.9	32.82848	0.821	-90.2	70.2	36.8	36.3	32.4	67.92964	17-18			
19	-14.116	-17.442	734.12497	-51.4	12.2	-84.9	42.7	34.11473	0.773	-96.3	71.0	37.2	40.9	31.1	74.08173	18-19			
20	-16.771	-16.756	778.70692	-44.0	14.6	-87.3	46.3	35.72614	0.712	-102.2	71.9	38.2	46.6	28.4	82.87239	19-20			
21	-16.596	-19.551	736.16959	-36.5	11.7	-85.8	50.0	34.20278	0.770	-101.1	69.2	43.3	41.2	20.5	81.27438	20-21			
22	-16.475	-22.065	707.31513	-27.2	8.8	-84.5	53.9	32.98387	0.815	-100.1	66.8	48.6	36.8	12.8	73.08070	21-22			
23	-16.393	-24.381	689.68574	-16.0	5.9	-83.4	58.0	31.98846	0.850	-99.3	64.6	53.8	33.8	5.3	67.33628	22-23			
24	-16.342	-26.556	681.61061	-3.5	3.0	-82.4	62.3	31.16601	0.876	-98.6	62.6	59.0	32.3	-2.0	63.22707	23-24			
25	-14.038	-26.658	648.34176	-4.6	2.7	-81.7	58.9	30.07958	0.929	-94.4	62.1	58.5	24.7	0.5	69.85024	24-25			
26	-11.924	-26.748	625.50017	-6.4	2.5	-81.2	55.2	29.17890	0.972	-90.2	61.7	58.4	17.2	1.9	64.08405	25-26			
27	-9.951	-26.828	611.60524	-11.0	2.3	-80.7	49.6	28.22125	0.993	-85.9	61.4	58.5	9.9	2.4	59.79035	26-27			
28	-8.323	-26.891	605.91210	-27.8	2.2	-80.4	47.3	27.01707	0.970	-82.2	61.1	58.9	4.0	2.2	49.35201	27-28			

JULY 31, 1964 13 HR 21 MIN 25 SEC 186 MS TAB NO 148 ATLAS PHOTO NO 148 POD SEQUENCE NO 302

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LUN		R		V		PTH		AZ	
				263.613		593.76758		-7.483		-27.316		2329.223		2.323		-68.627		115.894	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-10.870	-20.074	655.35258	-31.5	6.2	-82.6	50.6	30.47641	0.898	-93.6	68.1	41.1	29.3	26.4	0.	0-1			
2	-11.798	-22.624	633.85221	-43.5	6.5	-82.1	46.5	30.12339	0.914	-90.2	65.7	47.6	23.9	16.9	80.78322	1-2			
3	-9.871	-24.828	605.82950	-42.6	4.0	-80.9	46.7	28.53239	0.982	-85.5	63.3	53.2	13.3	9.8	87.76079	2-3			
4	-9.770	-22.847	618.89108	-58.5	5.6	-81.1	42.6	29.27200	0.950	-85.2	65.3	47.8	19.1	17.2	59.20265	3-4			
5	-9.663	-20.730	640.75351	-66.9	7.2	-81.2	38.7	30.15204	0.909	-84.7	67.3	42.4	25.8	24.7	63.28202	4-5			
6	-11.751	-20.419	657.09641	-53.7	8.4	-82.5	42.6	31.08105	0.873	-90.2	67.8	42.2	29.7	24.6	63.94057	5-6			
7	-14.006	-20.038	683.77634	-43.9	9.8	-84.0	46.3	32.20340	0.827	-95.7	68.5	42.5	34.9	23.2	69.20865	6-7			
8	-13.980	-22.357	658.47366	-33.8	7.5	-83.2	50.2	31.14389	0.870	-95.2	66.2	47.9	30.0	15.5	68.15028	7-8			
9	-13.971	-24.509	643.17556	-20.7	5.1	-82.5	54.3	30.26595	0.904	-94.8	64.1	53.2	26.4	7.9	63.24859	8-9			
10	-11.849	-24.681	619.92935	-28.1	4.5	-81.7	50.6	29.32328	0.947	-90.2	63.7	53.0	19.4	9.4	64.49193	9-10			
11	-9.871	-24.828	605.82950	-42.6	4.0	-80.9	46.7	28.53239	0.982	-85.5	63.3	53.2	13.3	9.8	60.06186	10-11			
12	-8.368	-26.770	594.88242	-29.0	2.2	-80.4	47.1	26.52854	0.970	-82.2	61.3	58.9	4.1	2.4	73.79359	11-12			
13	-8.240	-24.939	600.07940	-67.9	3.6	-80.4	44.3	27.77752	0.994	-81.6	63.1	53.7	9.6	9.4	55.00891	12-13			
14	-8.100	-23.011	612.71450	-77.1	5.0	-80.3	38.9	28.64116	0.974	-80.9	65.0	48.4	16.6	16.6	57.93903	13-14			
15	-7.946	-20.956	633.78445	-80.9	6.4	-80.2	35.1	29.46788	0.933	-80.0	67.0	43.1	23.9	23.9	61.81330	14-15			
16	-7.772	-18.731	664.57581	-83.0	7.7	-79.9	31.5	30.45963	0.884	-79.0	69.2	37.9	31.3	31.2	66.98404	15-16			
17	-9.546	-18.430	672.81429	-71.9	8.8	-81.2	35.0	31.21263	0.858	-84.2	69.6	37.1	32.9	32.3	54.47565	16-17			
18	-11.709	-18.011	691.25021	-60.6	10.3	-83.0	38.9	32.24380	0.821	-90.2	70.2	36.8	36.2	32.4	66.71827	17-18			
19	-14.056	-17.489	720.97008	-51.4	12.2	-84.9	42.7	33.50351	0.774	-96.3	70.9	37.2	40.8	31.1	72.72660	18-19			
20	-16.661	-16.820	764.55772	-44.1	14.5	-87.3	46.2	35.07701	0.714	-102.2	71.8	38.2	46.4	28.4	81.27462	19-20			
21	-16.490	-19.562	722.86601	-36.6	11.6	-85.8	49.9	33.58459	0.771	-101.1	69.2	43.3	41.1	20.5	79.76225	20-21			
22	-16.371	-22.029	694.51582	-27.3	8.7	-84.6	53.7	32.38685	0.816	-100.1	66.9	48.6	36.8	12.9	71.76587	21-22			
23	-16.289	-24.302	677.12851	-16.2	5.9	-83.5	57.7	31.40586	0.851	-99.3	64.7	53.8	33.7	5.4	66.13432	22-23			
24	-16.238	-26.437	669.07684	-3.8	3.0	-82.5	62.0	30.59275	0.877	-98.6	62.7	59.0	32.2	-1.8	62.08601	23-24			
25	-13.978	-26.539	636.52427	-4.9	2.7	-81.8	58.6	29.53128	0.929	-94.4	62.2	58.5	24.6	0.6	68.52022	24-25			
26	-11.903	-26.627	614.14226	-6.9	2.5	-81.2	54.9	28.64911	0.972	-90.2	61.8	58.4	17.2	2.0	62.49024	25-26			
27	-9.967	-26.707	600.49972	-11.7	2.3	-80.7	49.4	27.71235	0.993	-85.9	61.5	58.5	10.0	2.6	58.70446	26-27			
28	-8.368	-26.770	594.88242	-29.0	2.2	-80.4	47.1	26.52854	0.970	-82.2	61.3	58.9	4.1	2.4	48.45791	27-28			

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JULY 31, 1964 13 HR 21 MIN 30 SEC 306 MS TAB NO 149 ATLAS PHOTO NO 149 POD SEQUENCE NO 304

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				258.493	582.68213	-7.530	-27.219	2318.137	2.328	-68.560	115.880					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.863	-20.090	643.18922	-31.7	6.2	-82.7	50.5	29.91938	0.898	-93.6	68.1	41.1	29.2	26.3	0.	0- 1
2	-11.780	-22.577	622.30070	-43.6	6.5	-82.1	46.4	29.57441	0.914	-90.2	65.7	47.6	23.9	16.9	78.91648	1- 2
3	-9.888	-24.741	594.71152	-42.8	4.0	-81.0	46.5	28.00877	0.982	-85.5	63.4	53.2	13.4	9.9	86.18069	2- 3
4	-9.789	-22.796	607.60840	-58.5	5.6	-81.1	42.5	28.73832	0.949	-85.2	65.3	47.8	19.1	17.2	58.13610	3- 4
5	-9.683	-20.717	629.11283	-66.9	7.2	-81.2	38.7	29.60421	0.909	-84.7	67.3	42.4	25.8	24.7	62.14403	4- 5
6	-11.734	-20.411	645.16041	-53.8	8.4	-82.5	42.6	30.51649	0.873	-90.2	67.8	42.2	29.7	24.6	62.77934	5- 6
7	-13.947	-20.039	671.30013	-43.9	9.8	-84.0	46.2	31.61582	0.828	-95.7	68.4	42.5	34.9	23.2	67.92754	6- 7
8	-13.921	-22.315	646.42787	-33.9	7.4	-83.3	50.0	30.57412	0.870	-95.2	66.3	47.8	29.9	15.6	66.91685	7- 8
9	-13.913	-24.427	631.33282	-20.9	5.1	-82.6	54.0	29.70862	0.904	-94.8	64.2	53.0	19.5	9.5	62.10652	8- 9
10	-11.830	-24.597	608.55560	-28.4	4.5	-81.7	50.4	28.78530	0.947	-90.2	63.8	53.0	19.5	9.5	58.96031	10-11
11	-9.888	-24.741	594.71152	-42.8	4.0	-81.0	46.5	28.00877	0.982	-85.5	63.4	53.2	13.4	9.9	72.45049	11-12
12	-8.413	-26.648	583.83706	-30.1	2.2	-80.4	47.0	26.03931	0.970	-82.2	61.4	58.9	4.2	2.5	54.00138	12-13
13	-8.287	-24.851	589.03641	-67.8	3.7	-80.4	44.2	27.27440	0.994	-81.6	63.2	53.7	9.7	9.5	56.89168	13-14
14	-8.150	-22.958	601.51099	-77.0	5.0	-80.3	38.9	28.11732	0.973	-80.9	65.0	48.4	16.7	16.6	60.69806	14-15
15	-7.998	-20.940	622.23502	-80.8	6.4	-80.2	35.2	28.93072	0.933	-80.0	67.0	43.1	23.9	23.9	65.76043	15-16
16	-7.827	-18.755	652.45963	-82.9	7.7	-79.9	31.6	29.90414	0.884	-79.0	69.1	37.9	31.2	31.2	53.48922	16-17
17	-9.569	-18.459	660.58366	-71.8	8.8	-81.2	35.1	30.64521	0.859	-84.2	69.6	37.1	32.9	32.3	65.50316	17-18
18	-11.693	-18.048	678.67787	-60.6	10.3	-82.9	39.0	31.65743	0.822	-90.2	70.1	36.8	36.2	32.3	71.36874	18-19
19	-13.996	-17.537	707.77953	-51.5	12.1	-84.9	42.6	32.89064	0.775	-96.3	70.9	37.2	40.8	31.1	78.24688	19-20
20	-16.550	-16.885	750.37715	-44.1	14.4	-87.3	46.1	34.42643	0.715	-102.2	71.8	38.2	46.3	28.3	70.44710	20-21
21	-14.344	-19.573	709.53278	-36.7	11.6	-85.9	49.7	32.96503	0.772	-101.1	69.2	43.3	41.0	20.5	64.42864	21-22
22	-16.267	-21.993	681.69093	-27.5	8.7	-84.7	53.5	31.78555	0.817	-100.1	66.9	48.6	36.7	12.9	60.94284	22-23
23	-16.186	-24.224	664.55119	-16.4	5.9	-83.6	57.5	30.82235	0.851	-99.3	64.7	53.8	33.6	5.5	63.71926	23-24
24	-16.135	-26.318	656.52964	-4.0	3.0	-82.6	61.6	30.01889	0.878	-98.6	62.8	59.0	32.0	-1.5	67.19075	24-25
25	-13.919	-26.419	624.49020	-5.2	2.7	-81.9	58.2	28.98221	0.930	-94.4	62.3	58.5	24.6	0.7	61.71960	25-26
26	-11.883	-26.507	602.76688	-7.3	2.5	-81.3	54.6	28.11850	0.972	-90.1	61.9	58.4	17.2	2.2	57.61698	26-27
27	-9.982	-26.586	589.37729	-12.4	2.3	-80.8	49.2	27.20263	0.993	-85.9	61.6	58.5	10.0	2.7	47.56232	27-28
28	-8.413	-26.648	583.83706	-30.1	2.2	-80.4	47.0	26.03931	0.970	-82.2	61.4	58.9	4.2	2.5		

JULY 31, 1964 13 HR 21 MIN 35 SEC 426 MS TAB NO 150 ATLAS PHOTO NO 150 POD SEQUENCE NO 306

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				253.373	571.58130	-7.577	-27.121	2307.037	2.332	-68.493	115.865					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.856	-20.106	631.00651	-31.8	6.2	-82.7	50.3	29.36091	0.898	-93.6	68.1	41.1	29.2	26.3	0.	0- 1
2	-11.762	-22.531	610.71732	-43.7	6.5	-82.1	46.3	29.02392	0.914	-90.2	65.8	47.6	23.9	17.0	77.08042	1- 2
3	-9.905	-24.655	583.56957	-43.0	4.0	-81.0	46.4	27.48403	0.981	-85.5	63.5	53.2	13.4	9.9	84.59463	2- 3
4	-9.808	-22.746	596.29535	-58.6	5.7	-81.1	42.5	28.20320	0.949	-85.2	65.4	47.8	19.2	17.3	57.06569	3- 4
5	-9.704	-20.705	617.43549	-66.8	7.3	-81.2	38.7	29.05466	0.908	-84.7	67.4	42.4	25.8	24.7	61.00092	4- 5
6	-11.717	-20.405	633.18593	-53.8	8.4	-82.5	42.5	29.95010	0.873	-90.2	67.9	42.2	29.7	24.6	61.61413	5- 6
7	-13.888	-20.040	658.78477	-44.0	9.8	-84.1	46.1	31.02639	0.828	-95.7	68.4	42.5	34.8	23.2	66.64278	6- 7
8	-13.862	-22.273	634.34983	-34.1	7.4	-83.3	49.9	30.00283	0.871	-95.2	66.3	47.8	29.9	15.6	65.67778	7- 8
9	-13.854	-24.346	619.46506	-21.1	5.1	-82.6	53.8	29.15012	0.904	-94.8	64.3	53.2	26.3	8.1	60.94014	8- 9
10	-11.810	-24.513	597.15678	-28.6	4.5	-81.7	50.2	28.24614	0.947	-90.2	63.9	53.0	19.5	9.5	62.08881	9-10
11	-9.905	-24.655	583.56957	-43.0	4.0	-81.0	46.4	27.48403	0.981	-85.5	63.5	53.2	13.4	9.9	57.85619	10-11
12	-8.458	-26.528	572.77588	-31.1	2.2	-80.4	46.8	25.54933	0.970	-82.2	61.5	58.9	4.3	2.6	71.10404	11-12
13	-8.334	-24.764	577.97106	-67.7	3.7	-80.4	44.2	26.76980	0.995	-81.6	63.2	53.7	9.8	9.6	52.99167	12-13
14	-8.199	-22.906	590.27900	-76.8	5.1	-80.3	39.0	27.59217	0.973	-80.9	65.1	48.4	16.7	16.7	55.84079	13-14
15	-8.050	-20.925	610.65118	-80.7	6.4	-80.1	35.3	28.39197	0.933	-80.0	67.0	43.1	23.9	23.9	59.57802	14-15
16	-7.882	-18.780	640.30328	-82.8	7.7	-79.9	31.8	29.34683	0.884	-79.0	69.1	37.9	31.2	31.2	64.53118	15-16
17	-9.591	-18.489	648.31030	-71.8	8.8	-81.2	35.2	30.07583	0.859	-84.1	69.5	37.1	32.9	32.2	52.49922	16-17
18	-11.676	-18.086	666.06071	-60.6	10.3	-82.9	39.0	31.06897	0.822	-90.2	70.1	36.8	36.1	32.3	64.28349	17-18
19	-13.936	-17.586	694.54350	-51.5	12.1	-84.9	42.6	32.27564	0.775	-96.3	70.8	37.2	40.7	31.0	70.00674	18-19
20	-16.439	-16.951	736.15385	-44.2	14.3	-87.3	46.0	33.77389	0.717	-102.2	71.7	38.2	46.2	28.3	78.07765	19-20
21	-16.277	-19.585	696.16208	-36.8	11.5	-85.9	49.6	32.34374	0.773	-101.1	69.2	43.3	40.9	20.5	76.72571	20-21
22	-16.162	-21.959	668.83547	-27.6	8.7	-84.7	53.3	31.18903	0.817	-100.1	66.9	48.6	36.6	13.0	69.12271	21-22
23	-16.083	-24.147	651.95100	-16.6	5.9	-83.7	57.2	30.23779	0.852	-99.3	64.8	53.8	33.6	5.6	63.71926	22-23
24	-16.031	-26.201	643.96818	-4.2	3.1	-82.7	61.2	29.44440	0.879	-98.6	62.8	59.0	32.0	-1.5	59.79708	23-24
25	-13.859	-26.301	612.83896	-5.5	2.8	-82.0	57.9	28.43235	0.930	-94.4	62.4	58.5	24.5	0.9	65.86139	24-25
26	-11.862	-26.388	591.37367	-7.7	2.5	-81.3	54.4	27.58706	0.972	-90.1	62.1	58.4	17.2	2.3	60.53553	25-26
27	-9.998	-26.466	578.23769	-13.0	2.4	-80.8	49.0	26.69204	0.993	-85.9	61.7	58.5	10.0	2.8	56.52770	26-27
28	-8.458	-26.528	572.77588	-31.1	2.2	-80.4	46.8	25.54933	0.970	-82.2	61.5	58.9	4.3	2.6	46.66531	27-28

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TAB NO 151 ATLAS PHOTO NO 151 POD SEQUENCE NO 308
 JULY 31, 1964 13 HR 21 MIN 40 SEC 546 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
				248.253		560.46472	-7.625	-27.022	2295.920	2.337	-68.425	115.850
PHOTO DATA				A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA					
1	-10.848	-20.121	618.80396	-32.0	6.2	-82.8	50.1	28.80131	0.898	-93.6	68.0	41.2
2	-11.743	-22.485	599.10932	-43.9	6.5	-82.2	46.1	28.47226	0.914	-90.2	65.8	47.6
3	-9.922	-24.570	572.40704	-43.2	4.0	-81.0	46.3	26.95832	0.981	-85.5	63.6	53.2
4	-9.827	-22.696	584.95846	-58.6	5.7	-81.1	42.4	27.66696	0.949	-85.2	65.4	47.8
5	-9.725	-20.693	605.73192	-66.8	7.3	-81.2	38.7	28.50388	0.908	-84.7	67.4	42.4
6	-11.699	-20.399	621.18432	-53.9	8.4	-82.5	42.5	29.38243	0.873	-90.2	67.9	42.2
7	-13.829	-20.042	646.24302	-44.1	9.7	-84.1	46.0	30.43572	0.829	-95.7	68.4	42.5
8	-13.804	-22.232	622.24773	-34.2	7.4	-83.4	49.7	29.43040	0.871	-95.2	66.3	47.8
9	-13.795	-24.266	607.57674	-21.3	5.1	-82.7	53.5	28.59065	0.904	-94.8	64.4	53.2
10	-11.791	-24.430	585.73671	-28.9	4.5	-81.8	50.0	27.70597	0.947	-90.2	63.9	53.0
11	-9.922	-24.570	572.40704	-43.2	4.0	-81.0	46.3	26.95832	0.981	-85.5	63.6	53.2
12	-8.503	-26.407	561.69922	-32.1	2.3	-80.4	46.6	25.05865	0.970	-82.2	61.6	58.9
13	-8.381	-22.853	566.88644	-67.6	3.7	-80.3	44.1	26.26409	0.995	-81.6	63.3	53.7
14	-8.248	-22.853	579.02467	-76.7	5.1	-80.3	39.0	27.06598	0.973	-80.9	65.1	48.4
15	-8.102	-20.909	599.04269	-80.6	6.4	-80.1	35.3	27.85209	0.933	-80.0	67.0	43.1
16	-7.937	-18.806	628.12110	-82.7	7.7	-79.8	31.9	28.78835	0.884	-79.0	69.1	37.9
17	-9.614	-18.520	636.00939	-71.7	8.8	-81.2	35.3	29.50516	0.859	-84.1	69.5	37.1
18	-11.660	-18.124	653.41535	-60.7	10.3	-82.9	39.0	30.47019	0.823	-90.2	70.1	36.8
19	-13.875	-17.636	681.28079	-51.5	12.0	-84.9	42.5	31.65940	0.776	-96.3	70.8	37.2
20	-16.328	-17.017	721.90964	-44.2	14.2	-87.3	45.9	33.12039	0.719	-102.2	71.6	38.2
21	-16.170	-19.598	682.76803	-36.9	11.4	-85.9	49.5	31.72140	0.774	-101.1	69.1	43.3
22	-16.057	-19.925	655.95897	-27.7	8.6	-84.8	53.1	30.58845	0.818	-100.1	66.9	48.6
23	-15.979	-24.070	639.33322	-16.8	5.9	-83.8	56.9	29.65243	0.853	-99.3	64.9	53.8
24	-15.928	-26.083	631.39400	-4.5	3.1	-82.8	60.8	28.86934	0.879	-98.6	62.9	59.0
25	-13.799	-26.182	600.97165	-5.8	2.8	-82.0	57.5	27.88175	0.930	-94.4	62.5	58.5
26	-11.842	-26.269	579.96343	-8.1	2.6	-81.4	54.1	27.05483	0.972	-90.1	62.2	58.4
27	-10.013	-26.346	567.08141	-13.7	2.4	-80.8	48.7	26.18066	0.993	-85.9	61.9	58.5
28	-8.503	-26.407	561.69922	-32.1	2.3	-80.4	46.6	25.05865	0.970	-82.2	61.6	58.9

TAB NO 152 ATLAS PHOTO NO 152 POD SEQUENCE NO 310
 JULY 31, 1964 13 HR 21 MIN 45 SEC 666 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
				243.134		549.33212	-7.673	-26.922	2284.787	2.341	-68.356	115.835
PHOTO DATA				A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA					
1	-10.841	-20.137	606.58128	-32.2	6.2	-82.8	49.9	28.24077	0.898	-93.6	68.0	41.2
2	-11.725	-22.439	587.47858	-44.0	6.5	-82.2	46.0	27.91952	0.914	-90.2	65.9	47.6
3	-9.940	-24.485	561.22473	-43.4	4.1	-81.0	46.1	26.43167	0.981	-85.5	63.7	53.2
4	-9.846	-22.647	573.59755	-58.6	5.7	-81.1	42.4	27.12959	0.948	-85.2	65.5	47.8
5	-9.746	-20.682	594.00064	-66.8	7.3	-81.2	38.8	27.95180	0.908	-84.7	67.4	42.4
6	-11.682	-20.394	609.15636	-53.9	8.4	-82.5	42.4	28.81352	0.873	-90.2	67.9	42.2
7	-13.770	-20.044	633.67831	-44.2	9.7	-84.1	45.9	29.84397	0.829	-95.7	68.4	42.5
8	-13.745	-22.192	610.12589	-34.3	7.4	-83.4	49.5	28.85704	0.871	-95.2	66.4	47.8
9	-13.736	-24.185	595.67311	-21.5	5.1	-82.7	53.3	28.03046	0.905	-94.8	64.4	53.2
10	-11.772	-24.347	574.29827	-29.1	4.5	-81.8	49.8	27.16493	0.947	-90.2	64.0	53.0
11	-9.940	-24.485	561.22473	-43.4	4.1	-81.0	46.1	26.43167	0.981	-85.5	63.7	53.2
12	-8.548	-26.287	550.60729	-33.0	2.3	-80.4	46.5	24.56731	0.970	-82.2	61.8	58.9
13	-8.429	-24.590	555.78181	-67.5	3.7	-80.3	44.1	25.75720	0.995	-81.6	63.4	53.7
14	-8.298	-22.802	567.74612	-76.5	5.1	-80.2	39.0	26.53866	0.972	-80.8	65.2	48.4
15	-8.154	-20.895	587.40639	-80.4	6.5	-80.1	35.4	27.31092	0.933	-80.0	67.0	43.1
16	-7.993	-18.832	615.90833	-82.6	7.8	-79.8	32.0	28.22847	0.884	-79.0	69.1	37.9
17	-9.637	-18.551	623.67805	-71.7	8.8	-81.2	35.3	28.93308	0.859	-84.1	69.5	37.1
18	-11.643	-18.164	640.74123	-60.7	10.2	-82.9	39.0	29.88806	0.823	-90.2	70.0	36.8
19	-13.815	-17.686	667.99362	-51.6	12.0	-84.9	42.5	31.04202	0.777	-96.3	70.7	37.2
20	-16.218	-17.083	707.65042	-44.3	14.1	-87.3	45.9	32.46620	0.720	-102.2	71.5	38.2
21	-16.063	-19.611	669.35965	-37.0	11.4	-85.9	49.3	31.09833	0.775	-101.1	69.1	43.3
22	-15.953	-21.891	643.06895	-27.9	8.6	-84.8	52.9	29.98724	0.819	-100.1	66.9	48.6
23	-15.875	-23.994	626.70615	-17.0	5.9	-83.8	56.6	29.06664	0.854	-99.3	64.9	53.8
24	-15.824	-25.966	618.81635	-4.7	3.1	-82.9	60.5	28.29412	0.880	-98.6	63.0	59.0
25	-13.740	-26.064	589.09451	-6.1	2.8	-82.1	57.2	27.33069	0.931	-94.4	62.6	58.5
26	-11.821	-26.150	568.53995	-8.5	2.6	-81.4	53.8	26.52197	0.972	-90.1	62.3	58.4
27	-10.029	-26.226	555.91030	-14.3	2.4	-80.8	48.5	25.66869	0.994	-85.9	62.0	58.5
28	-8.548	-26.287	550.60729	-33.0	2.3	-80.4	46.5	24.56731	0.970	-82.2	61.8	58.9

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JULY 31, 1964 13 HR 21 MIN 50 SEC 786 MS

TAB NO 153

ATLAS PHOTO NO 153

POD SEQUENCE NO 312

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				238.014		538.18396	-7.722	-26.820	2273.639	2.345	-68.287	115.819				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.834	-20.152	594.33899	-32.3	6.2	-82.8	49.8	27.67941	0.898	-93.6	68.0	41.3	29.0	26.1	0.	0-1
2	-11.708	-22.394	575.82689	-44.1	6.5	-82.2	45.9	27.36578	0.914	-90.2	65.9	47.6	24.0	17.1	71.66454	1-2
3	-9.958	-24.400	550.02379	-43.6	4.1	-81.0	46.0	25.90415	0.981	-85.5	63.8	53.2	13.7	10.2	79.81392	2-3
4	-9.866	-22.598	562.21302	-58.6	5.7	-81.1	42.3	26.59110	0.948	-85.2	65.5	47.8	19.3	17.4	53.83777	3-4
5	-9.768	-20.672	582.24131	-66.7	7.3	-81.2	38.8	27.39840	0.908	-84.7	67.4	42.4	25.9	24.6	57.55166	4-5
6	-11.666	-20.389	597.10316	-53.9	8.4	-82.5	42.4	28.24340	0.873	-90.2	67.9	42.2	29.7	24.6	58.10450	5-6
7	-13.711	-20.047	621.09341	-44.3	9.7	-84.1	45.9	29.25127	0.829	-95.7	68.4	42.5	34.7	23.3	62.78079	6-7
8	-13.687	-22.152	597.98779	-34.5	7.4	-83.4	49.4	28.28292	0.871	-95.2	66.4	47.8	29.9	15.8	61.94224	7-8
9	-13.678	-24.105	583.75828	-21.8	5.1	-82.8	53.1	27.46974	0.905	-94.8	64.5	53.2	26.3	8.4	57.50499	8-9
10	-11.753	-24.264	562.84393	-29.4	4.6	-81.8	49.6	26.62313	0.947	-90.2	64.1	53.0	19.6	9.8	58.47574	9-10
11	-9.958	-24.400	550.02379	-43.6	4.1	-81.0	46.0	25.90415	0.981	-85.5	63.8	53.2	13.7	10.2	54.53412	10-11
12	-8.595	-26.167	539.50087	-33.8	2.3	-80.3	46.4	24.07537	0.971	-82.2	61.9	58.9	4.6	3.0	67.04897	11-12
13	-8.477	-24.503	544.65720	-67.4	3.7	-80.3	44.0	25.24912	0.996	-81.6	63.5	53.7	10.1	9.8	49.95133	12-13
14	-8.349	-22.750	596.44270	-76.4	5.1	-80.2	39.0	26.01019	0.972	-80.8	65.2	48.4	16.9	16.8	52.67185	13-14
15	-8.208	-20.881	575.74078	-80.3	6.5	-80.1	35.5	26.76839	0.932	-80.0	67.1	43.1	24.0	24.0	56.19871	14-15
16	-8.050	-18.859	603.66250	-82.5	7.8	-79.8	32.2	27.66707	0.885	-79.0	69.1	37.9	31.1	31.1	60.82401	15-16
17	-9.661	-18.583	611.31500	-71.6	8.8	-81.2	35.4	28.35952	0.860	-84.1	69.4	37.1	32.8	32.2	49.51469	16-17
18	-11.627	-18.203	628.03866	-60.6	10.2	-82.9	39.0	29.29559	0.823	-90.2	70.0	36.8	36.0	32.2	60.61050	17-18
19	-13.756	-17.737	654.88414	-51.6	11.9	-84.9	42.5	30.47359	0.778	-96.3	70.7	37.2	40.5	30.9	49.91526	18-19
20	-16.108	-17.150	693.38064	-44.4	14.1	-87.3	45.8	31.81152	0.722	-102.2	71.5	38.2	45.8	28.1	73.29709	19-20
21	-15.998	-17.789	641.34639	-51.6	11.9	-84.9	42.5	30.47476	0.776	-101.0	69.1	43.3	40.6	20.6	72.15800	20-21
22	-15.849	-21.857	630.17092	-28.0	8.6	-84.9	52.7	29.38566	0.820	-100.1	69.0	40.0	36.4	13.2	55.13555	21-22
23	-15.773	-23.917	614.07590	-17.2	5.9	-83.9	56.3	28.48071	0.854	-99.3	65.0	53.8	33.3	6.0	60.07662	22-23
24	-15.722	-25.850	606.24184	-4.9	3.1	-83.0	60.1	27.71904	0.881	-98.6	63.1	59.0	31.7	-1.1	56.35142	23-24
25	-13.681	-25.946	577.21224	-6.4	2.8	-82.2	56.9	26.77938	0.931	-94.4	62.7	58.5	24.4	1.3	61.88409	24-25
26	-11.802	-26.031	557.10637	-8.9	2.6	-81.5	53.5	25.98863	0.972	-90.1	62.4	58.4	17.2	2.7	56.98154	25-26
27	-10.045	-26.107	544.72614	-14.9	2.4	-80.8	48.3	25.15629	0.994	-85.9	62.1	58.5	10.2	3.2	53.25300	26-27
28	-8.595	-26.167	539.50087	-33.8	2.3	-80.3	46.4	24.07537	0.971	-82.2	61.9	58.9	4.6	3.0	43.96687	27-28

TAB NO 154

ATLAS PHOTO NO 154

POD SEQUENCE NO 314

JULY 31, 1964 13 HR 21 MIN 55 SEC 906 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				232.894		527.01929	-7.771	-26.718	2262.475	2.350	-68.217	115.804				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.827	-20.167	582.07593	-32.5	6.2	-82.9	49.6	27.11684	0.898	-93.6	68.0	41.3	28.9	26.1	0.	0-1
2	-11.691	-22.349	564.14904	-44.2	6.1	-82.2	45.8	26.81080	0.913	-90.2	66.0	47.6	24.0	17.2	69.89192	1-2
3	-9.976	-24.315	538.80093	-43.8	4.1	-81.0	45.9	25.37559	0.980	-85.5	63.9	53.2	13.7	10.3	78.21273	2-3
4	-9.886	-22.549	550.80346	-58.6	5.7	-81.1	42.3	26.05143	0.948	-85.2	65.6	47.8	19.4	17.5	52.75605	3-4
5	-9.790	-20.662	570.45466	-66.7	7.3	-81.1	38.8	26.84371	0.908	-84.7	67.4	42.4	25.9	24.8	56.39511	4-5
6	-11.649	-20.384	585.02147	-54.0	8.4	-82.6	42.4	27.67194	0.873	-90.2	67.9	42.2	29.6	24.6	56.92994	5-6
7	-13.653	-20.050	608.48041	-44.3	9.6	-84.1	45.8	28.65724	0.830	-95.7	68.4	42.5	34.7	23.3	61.49080	6-7
8	-13.629	-22.112	585.82380	-34.6	7.4	-83.5	49.2	27.70757	0.871	-95.2	66.4	47.8	29.8	15.8	60.69085	7-8
9	-13.620	-24.026	571.82088	-22.0	5.1	-82.9	52.8	26.90797	0.905	-94.8	64.6	53.2	26.3	8.5	56.34783	8-9
10	-11.735	-24.181	551.36671	-29.6	4.6	-81.9	49.5	26.08026	0.946	-90.2	64.2	53.0	19.6	9.9	57.26969	9-10
11	-9.976	-24.315	538.80093	-43.8	4.1	-81.0	45.9	25.37559	0.980	-85.5	63.9	53.2	13.7	10.3	53.42327	10-11
12	-8.641	-26.047	528.37777	-34.6	2.3	-80.3	46.2	23.58265	0.971	-82.2	62.0	58.9	4.7	3.1	65.69186	11-12
13	-8.525	-24.417	533.51226	-67.3	3.8	-80.3	44.0	24.73986	0.996	-81.6	63.6	53.7	10.2	9.9	48.93403	12-13
14	-8.399	-22.699	545.11600	-76.2	5.2	-80.2	39.1	25.48063	0.972	-80.8	65.3	48.4	17.0	16.9	51.60998	13-14
15	-8.261	-20.867	564.04972	-80.2	6.5	-80.0	35.6	26.22469	0.932	-80.0	67.1	43.1	24.0	24.0	55.06565	14-15
16	-8.106	-18.886	591.39022	-82.4	7.8	-79.8	32.3	27.10446	0.885	-79.0	69.0	37.9	31.1	31.1	59.58170	15-16
17	-9.685	-18.615	598.92356	-71.6	8.8	-81.1	35.5	27.78465	0.860	-84.1	69.4	37.1	32.8	32.1	48.51512	16-17
18	-11.611	-18.244	615.30669	-60.6	10.2	-82.9	39.0	28.70175	0.824	-90.2	69.9	36.8	36.0	32.2	59.38121	17-18
19	-13.696	-17.789	641.34639	-51.6	11.9	-84.9	42.4	29.38566	0.779	-96.3	70.6	37.2	40.4	30.8	64.54958	18-19
20	-15.998	-17.218	679.08781	-44.4	14.0	-87.2	45.7	31.15579	0.723	-102.2	71.4	38.2	45.7	28.0	71.70938	19-20
21	-15.851	-19.638	642.49467	-37.1	11.3	-86.0	49.0	29.85004	0.777	-101.0	69.1	43.3	40.6	20.6	70.63396	20-21
22	-15.745	-21.824	617.24949	-28.2	8.6	-84.9	52.5	28.78301	0.820	-100.1	67.0	48.6	36.3	13.2	63.80224	21-22
23	-15.670	-23.841	601.42554	-17.4	5.9	-84.0	56.1	27.89385	0.855	-99.3	65.0	53.8	33.3	6.1	58.85779	22-23
24	-15.619	-25.733	593.65201	-5.2	3.2	-83.1	59.8	27.14327	0.882	-98.6	63.2	59.0	31.6	-0.9	55.19997	23-24
25	-13.622	-25.829	565.31182	-6.7	2.9	-82.3	56.6	26.22723	0.931	-94.4	62.8	58.5	24.4	1.4	60.56187	24-25
26	-11.782	-25.913	545.65401	-9.3	2.6	-81.5	53.2	25.45441	0.972	-90.1	62.5	58.4	17.2	2.8	55.79630	25-26
27	-10.061	-25.988	533.52390	-15.5	2.5	-80.8	48.1	24.64300	0.994	-85.9	62.2	58.5	10.2	3.3	52.15898	26-27
28	-8.641	-26.047	528.37777	-34.6	2.3	-80.3	46.2	23.58265	0.971	-82.2	62.0	58.9	4.7	3.1	43.06492	27-28

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JULY 31, 1964 13 HR 22 MIN 1 SEC 26 MS TAB NO 155 ATLAS PHOTO NO 155 POD SEQUENCE NO 316

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				227.774	515.83881	-7.820	-26.615	2251.294	2.355	-68.147	115.788					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.819	-20.182	569.79295	-32.6	6.2	-82.9	49.4	26.55283	0.898	-93.6	68.0	41.3	28.9	26.0	0.	0-1
2	-11.673	-22.305	552.43968	-44.3	6.5	-82.2	45.7	26.25432	0.913	-90.2	66.0	47.6	24.0	17.2	68.14341	1-2
3	-9.994	-24.231	527.55356	-43.9	4.1	-81.0	45.8	24.84588	0.980	-85.5	63.9	53.2	13.8	10.4	76.60570	2-3
4	-9.906	-22.501	539.36401	-58.6	5.7	-81.1	42.3	25.51035	0.947	-85.2	65.6	47.8	19.4	17.5	51.67069	3-4
5	-9.811	-20.653	558.63312	-66.6	7.3	-81.1	38.9	26.28739	0.908	-84.7	67.4	42.4	25.9	24.8	55.23399	4-5
6	-11.632	-20.381	572.90299	-54.0	8.4	-82.6	42.3	27.09874	0.873	-90.2	67.9	42.2	29.6	24.6	55.75161	5-6
7	-13.594	-20.054	595.83004	-44.4	9.6	-84.2	45.7	28.06146	0.830	-95.7	68.4	42.5	34.6	23.3	60.19743	6-7
8	-13.570	-22.072	573.62782	-34.7	7.4	-83.5	49.1	27.13071	0.872	-95.2	68.4	47.8	29.8	15.9	59.63444	7-8
9	-13.561	-23.947	554.85759	-22.2	5.2	-82.9	52.6	26.34498	0.905	-94.8	64.6	53.2	26.2	8.6	59.18657	8-9
10	-11.716	-24.099	539.86372	-29.8	4.6	-81.9	49.3	25.53616	0.946	-90.2	64.3	53.0	19.6	10.0	56.06128	9-10
11	-9.994	-24.231	527.55356	-43.9	4.1	-81.0	45.8	24.84588	0.980	-85.5	63.9	53.2	13.8	10.4	52.30996	10-11
12	-8.687	-25.927	517.23759	-35.4	2.4	-80.3	46.1	23.08907	0.971	-82.2	62.1	58.9	4.8	3.2	64.33134	11-12
13	-8.573	-24.331	522.34662	-67.1	3.8	-80.3	44.0	24.22914	0.996	-81.6	63.7	53.7	10.3	10.0	47.91445	12-13
14	-8.450	-22.649	533.76147	-76.1	5.2	-80.2	39.1	24.94978	0.971	-80.8	65.3	48.4	17.0	17.0	50.54477	13-14
15	-8.314	-20.854	552.32610	-80.0	6.5	-80.0	35.7	25.67949	0.932	-80.0	67.1	43.1	24.0	24.0	53.92838	14-15
16	-8.162	-18.914	579.08127	-82.3	7.9	-79.7	32.5	26.54020	0.885	-79.0	69.0	37.9	31.1	31.1	58.33467	15-16
17	-9.709	-18.649	586.49281	-71.5	8.9	-81.1	35.6	27.20796	0.860	-84.1	69.4	37.1	32.7	32.1	47.51210	16-17
18	-11.595	-18.285	602.53339	-60.6	10.2	-82.9	39.1	28.10598	0.824	-90.2	69.9	36.8	35.9	32.1	58.14790	17-18
19	-13.635	-17.841	627.96697	-51.7	11.8	-84.9	42.4	29.18216	0.780	-96.3	70.5	37.2	40.3	30.8	63.18026	18-19
20	-15.887	-17.286	644.75646	-44.5	13.9	-87.2	45.6	30.49828	0.725	-102.2	71.3	38.2	45.6	28.0	70.12033	19-20
21	-15.745	-19.652	629.01428	-37.2	11.2	-86.0	48.9	29.22368	0.778	-101.0	69.0	43.3	40.5	20.6	69.10554	20-21
22	-15.641	-21.792	604.29774	-28.3	8.5	-85.0	52.3	28.17895	0.821	-100.1	67.0	48.6	36.3	13.3	62.46380	21-22
23	-15.567	-23.766	588.75117	-17.6	5.9	-84.1	55.8	27.30590	0.856	-99.3	65.1	53.8	33.2	6.2	57.63491	22-23
24	-15.517	-25.617	581.04551	-5.4	3.2	-83.2	59.4	26.56675	0.883	-98.6	63.3	59.0	31.5	-0.8	54.04582	23-24
25	-13.563	-25.712	553.39220	-7.0	2.9	-82.3	56.3	25.67421	0.932	-94.4	62.9	58.5	24.3	1.5	59.23966	24-25
26	-11.762	-25.795	534.18211	-9.7	2.7	-81.6	53.0	24.91928	0.972	-90.1	62.6	58.4	17.2	2.9	54.60954	25-26
27	-10.078	-25.869	522.30303	-16.1	2.5	-80.9	47.9	24.12871	0.994	-85.9	62.3	58.5	10.3	3.4	51.06305	26-27
28	-8.687	-25.927	517.23759	-35.4	2.4	-80.3	46.1	23.08907	0.971	-82.2	62.1	58.9	4.8	3.2	42.16140	27-28

JULY 31, 1964 13 HR 22 MIN 6 SEC 145 MS TAB NO 156 ATLAS PHOTO NO 156 POD SEQUENCE NO 318

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				222.654	504.64175	-7.870	-26.511	2240.097	2.359	-68.076	115.771					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.812	-20.197	557.48917	-32.8	6.2	-83.0	49.3	25.98727	0.898	-93.6	68.0	41.4	28.8	26.0	0.	0-1
2	-11.655	-22.262	540.69662	-44.3	6.5	-82.2	45.7	25.69624	0.913	-90.2	66.0	47.6	24.0	17.3	66.42216	1-2
3	-10.012	-24.147	516.28013	-44.1	4.1	-81.0	45.7	24.31494	0.980	-85.5	64.0	53.2	13.9	10.4	74.99255	2-3
4	-9.925	-22.454	527.89259	-58.6	5.8	-81.1	42.2	24.96776	0.947	-85.1	65.7	47.8	19.5	17.6	50.58139	3-4
5	-9.833	-20.645	546.77402	-66.6	7.3	-81.1	38.9	25.72931	0.908	-84.7	67.4	42.4	25.9	24.8	54.06782	4-5
6	-11.615	-20.378	560.74494	-54.0	8.3	-82.6	42.3	26.52366	0.873	-90.2	67.9	42.2	29.6	24.6	54.56910	5-6
7	-13.534	-20.059	583.13927	-44.5	9.6	-84.2	45.6	27.46377	0.831	-95.7	68.4	42.5	34.6	23.3	58.90026	6-7
8	-13.511	-22.034	561.39749	-34.9	7.4	-83.5	48.9	26.55223	0.872	-95.2	68.4	47.9	29.8	15.9	58.17249	7-8
9	-13.502	-23.868	547.86659	-22.4	5.2	-83.0	52.4	25.78070	0.905	-94.8	64.7	53.2	26.2	8.7	54.02091	8-9
10	-11.697	-24.018	528.33325	-30.0	4.6	-81.9	49.1	24.99076	0.946	-90.1	64.3	53.0	19.6	10.0	54.85049	9-10
11	-10.012	-24.147	516.28013	-44.1	4.1	-81.0	45.7	24.31494	0.980	-85.5	64.0	53.2	13.9	10.4	51.19376	10-11
12	-8.733	-25.808	506.07930	-36.0	2.4	-80.3	46.0	22.59457	0.971	-82.2	62.3	58.9	4.9	3.3	62.96705	11-12
13	-8.621	-24.246	511.15278	-67.0	3.8	-80.3	43.9	23.71685	0.996	-81.6	63.8	53.7	10.4	10.1	46.89244	12-13
14	-8.500	-22.599	522.37711	-75.9	5.2	-80.2	39.1	24.41755	0.971	-80.8	65.4	48.4	17.1	17.0	49.47581	13-14
15	-8.367	-20.843	540.56739	-79.9	6.6	-80.0	35.8	25.13267	0.932	-80.0	67.1	43.1	24.0	24.0	52.78643	14-15
16	-8.219	-18.944	566.73239	-82.1	7.9	-79.7	32.7	25.97413	0.885	-79.0	69.0	37.9	31.1	31.0	57.08237	15-16
17	-9.732	-18.683	574.01936	-71.4	8.9	-81.1	35.7	26.62930	0.860	-84.1	69.4	37.2	32.7	32.0	46.50552	16-17
18	-11.579	-18.328	589.71519	-60.6	10.2	-82.9	39.1	27.50811	0.825	-90.2	69.9	36.8	35.9	32.1	56.90986	17-18
19	-13.575	-17.895	614.54202	-51.7	11.8	-84.9	42.4	28.55835	0.781	-96.2	70.5	37.2	40.2	30.7	61.80687	18-19
20	-15.776	-17.355	650.38218	-44.5	13.8	-87.2	45.6	29.83881	0.727	-102.2	71.2	38.2	45.5	27.9	68.52951	19-20
21	-15.638	-19.668	615.49500	-37.3	11.1	-86.0	48.8	28.59551	0.779	-101.0	69.0	43.3	40.4	20.6	67.57190	20-21
22	-15.536	-21.760	591.31308	-28.4	8.5	-85.0	52.1	27.57336	0.822	-100.1	67.0	48.6	36.2	13.3	61.11996	21-22
23	-15.464	-23.691	576.05084	-17.7	5.9	-84.1	55.5	26.71676	0.856	-99.3	65.2	53.8	33.1	6.3	56.40755	22-23
24	-15.413	-25.502	568.42090	-5.6	3.2	-83.3	59.1	25.98944	0.884	-98.6	63.4	59.0	31.4	-0.6	52.88874	23-24
25	-13.503	-25.596	541.45210	-7.2	2.9	-82.4	56.0	25.12024	0.932	-94.4	63.0	58.5	24.3	1.7	57.91677	24-25
26	-11.742	-25.677	522.68945	-10.1	2.7	-81.6	52.7	24.38318	0.972	-90.1	62.7	58.4	17.2	3.0	53.42097	25-26
27	-10.094	-25.751	511.06240	-16.7	2.5	-80.9	47.7	23.61334	0.994	-85.9	62.5	58.5	10.3	3.5	49.96511	26-27
28	-8.733	-25.808	506.07930	-36.0	2.4	-80.3	46.0	22.59457	0.971	-82.2	62.3	58.9	4.9	3.3	41.25609	27-28

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JULY 31, 1964 13 HR 22 MIN 11 SEC 265 MS

TAB NO 157

ATLAS PHOTO NO 157

POD SEQUENCE NO 320

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				217.534			493.42853	-7.920	-26.405	2228.884	2.364	-68.004	115.755			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.806	-20.212	545.16492	-32.9	6.2	-83.0	49.1	25.42051	0.898	-93.6	68.0	41.4	28.8	25.9	0.	0- 1
2	-11.636	-22.219	528.92775	-44.4	6.5	-82.3	45.6	25.13693	0.913	-90.2	66.1	47.6	24.1	17.3	64.70781	1- 2
3	-10.029	-24.064	504.98481	-44.3	4.2	-81.0	45.6	23.78297	0.979	-85.5	64.1	53.2	13.9	10.5	73.37516	2- 3
4	-9.944	-22.407	516.39639	-58.6	5.8	-81.1	42.2	24.42400	0.947	-85.1	65.7	47.8	19.5	17.6	48.48932	3- 4
5	-9.854	-20.637	534.88813	-66.5	7.3	-81.1	39.0	25.16997	0.908	-84.7	67.4	42.4	25.9	24.8	52.89871	4- 5
6	-11.598	-20.376	548.55904	-54.0	8.3	-82.6	42.3	25.94727	0.873	-90.2	67.9	42.2	29.6	24.6	53.38382	5- 6
7	-13.475	-20.064	570.42124	-44.5	9.6	-84.2	45.5	26.86479	0.831	-95.7	68.4	42.5	34.5	23.2	57.60097	6- 7
8	-13.452	-21.996	549.14167	-35.0	7.4	-83.6	48.8	25.97255	0.872	-95.2	66.5	47.9	29.8	15.9	56.90759	7- 8
9	-13.443	-23.790	535.85317	-22.6	5.2	-83.0	52.2	25.21536	0.905	-94.8	64.8	53.2	26.2	8.8	52.85236	8- 9
10	-11.678	-23.937	516.77999	-30.2	4.6	-82.0	48.9	24.44429	0.946	-90.1	64.4	53.0	19.7	10.1	53.63769	9-10
11	-10.029	-24.064	504.98481	-44.3	4.2	-81.0	45.6	23.78297	0.979	-85.5	64.1	53.2	13.9	10.5	50.07525	10-11
12	-8.778	-25.690	494.90413	-36.7	2.4	-80.3	45.9	22.09926	0.971	-82.2	62.4	58.9	5.0	3.4	61.59985	11-12
13	-8.669	-24.161	499.94061	-66.9	3.8	-80.2	43.9	23.20337	0.997	-81.6	63.9	53.7	10.5	10.2	45.86850	12-13
14	-8.551	-22.550	510.96966	-75.8	5.2	-80.1	39.2	23.88424	0.971	-80.8	65.5	48.4	17.1	17.0	48.40435	13-14
15	-8.420	-20.831	528.78370	-79.8	6.6	-79.9	35.9	24.58470	0.932	-80.0	67.1	43.1	24.0	24.0	51.64178	14-15
16	-8.275	-18.974	554.35801	-82.0	7.9	-79.7	32.8	25.40690	0.886	-79.0	69.0	38.0	31.0	31.0	55.82783	15-16
17	-9.756	-18.718	561.51850	-71.4	8.9	-81.1	35.8	26.04937	0.861	-84.1	69.3	37.2	32.7	32.0	45.49641	16-17
18	-11.562	-18.371	576.86872	-60.6	10.2	-82.9	39.1	26.90893	0.825	-90.2	69.8	36.8	35.8	32.0	55.66921	17-18
19	-13.514	-17.949	601.09019	-51.7	11.7	-84.9	42.4	27.93329	0.782	-96.2	70.4	37.2	40.1	30.7	60.43164	18-19
20	-15.665	-17.425	635.98671	-44.6	13.7	-87.2	45.5	29.17836	0.728	-102.2	71.2	38.2	45.3	27.9	66.94017	19-20
21	-15.530	-19.684	601.95210	-37.4	11.1	-86.0	48.7	27.96626	0.780	-101.0	69.0	43.3	40.3	20.6	66.03784	20-21
22	-15.431	-21.729	576.30567	-28.5	9.5	-85.1	51.9	26.96673	0.823	-100.1	67.0	48.6	36.1	13.4	59.77378	21-22
23	-15.360	-23.617	563.33075	-17.9	5.9	-84.2	55.3	26.12671	0.857	-99.3	65.2	53.8	33.1	6.4	55.17755	22-23
24	-15.310	-25.387	555.78093	-5.9	3.3	-83.4	58.7	25.41142	0.884	-98.6	63.5	59.0	31.4	-0.5	51.72957	23-24
25	-13.464	-25.479	529.49383	-7.5	3.0	-82.5	55.7	24.56542	0.932	-94.4	63.1	58.5	24.2	1.8	56.59392	24-25
26	-11.721	-25.560	511.17788	-10.5	2.7	-81.6	52.5	23.84620	0.972	-90.1	62.8	58.4	17.2	3.1	52.23131	25-26
27	-10.109	-25.632	499.80354	-17.2	2.5	-80.9	47.5	23.09705	0.994	-85.9	62.6	58.5	10.4	3.6	48.86518	26-27
28	-8.778	-25.690	494.90413	-36.7	2.4	-80.3	45.9	22.09926	0.971	-82.2	62.4	58.9	5.0	3.4	40.34931	27-28

JULY 31, 1964 13 HR 22 MIN 16 SEC 385 MS

TAB NO 158

ATLAS PHOTO NO 158

POD SEQUENCE NO 322

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LON		R		V		PTH		AZ	
				212.414				482.19849		-7.971		-26.299		2217.654		2.369		-67.932		115.739	
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.799	-20.227	532.81963	-33.1	6.2	-83.0	48.9	24.85256	0.898	-93.6	67.9	41.5	28.7	25.9	0.	0- 1					
2	-11.618	-22.175	517.13361	-44.5	6.5	-82.3	45.5	24.57642	0.913	-90.2	66.1	47.6	24.1	17.4	62.99619	1- 2					
3	-10.047	-23.981	493.66754	-44.4	4.2	-81.0	45.5	23.24997	0.979	-85.5	64.2	53.2	14.0	10.6	71.75368	2- 3					
4	-9.964	-22.360	504.87591	-58.6	5.8	-81.1	42.2	23.87909	0.947	-85.1	65.8	47.8	19.6	17.6	48.39465	3- 4					
5	-9.875	-20.629	522.97661	-66.5	7.4	-81.1	39.0	24.60942	0.908	-84.7	67.5	42.4	25.9	24.8	51.72697	4- 5					
6	-11.580	-20.374	536.34657	-54.1	8.3	-82.6	42.3	25.36962	0.873	-90.2	67.9	42.2	29.6	24.6	52.19602	5- 6					
7	-13.415	-20.070	557.67743	-44.6	9.5	-84.2	45.4	26.26461	0.832	-95.7	68.4	42.5	34.5	23.2	56.29962	6- 7					
8	-13.393	-21.958	536.86111	-35.1	7.4	-83.6	48.6	25.39170	0.872	-95.2	66.5	47.9	29.7	16.0	51.68108	7- 8					
9	-13.383	-23.712	523.81747	-22.8	5.2	-83.1	51.9	24.64897	0.906	-94.8	64.8	53.2	26.2	8.8	51.68108	8- 9					
10	-11.658	-23.856	505.20395	-30.5	4.6	-82.0	48.8	23.89674	0.946	-90.1	64.5	53.0	19.7	10.2	52.42318	9-10					
11	-10.047	-23.981	493.66754	-44.4	4.2	-81.0	45.5	23.24997	0.979	-85.5	64.2	53.2	14.0	10.6	48.95451	10-11					
12	-8.824	-25.570	483.71158	-37.3	2.4	-80.3	45.7	21.60312	0.971	-82.2	62.5	58.9	5.1	3.6	60.22970	11-12					
13	-8.717	-24.076	488.70803	-66.8	3.9	-80.2	43.9	22.68875	0.997	-81.6	64.0	53.7	10.6	10.3	44.84262	12-13					
14	-8.601	-22.500	499.53962	-75.6	5.3	-80.1	39.2	23.34988	0.971	-80.8	65.5	48.4	17.2	17.1	47.33049	13-14					
15	-8.473	-20.819	516.97615	-79.6	6.6	-79.9	36.0	24.03563	0.932	-80.0	67.2	43.1	24.0	24.0	50.49465	14-15					
16	-8.331	-19.004	541.95998	-81.9	7.9	-79.6	33.0	24.83859	0.886	-79.0	68.9	38.0	31.0	31.0	54.57145	15-16					
17	-9.779	-18.753	548.99221	-71.3	8.9	-81.1	35.9	25.46826	0.861	-84.1	69.3	37.2	32.6	32.0	44.48510	16-17					
18	-11.545	-18.414	563.99619	-60.6	10.2	-82.9	39.2	26.30852	0.826	-90.2	69.8	36.8	35.8	32.0	54.42611	17-18					
19	-13.453	-18.003	587.61398	-51.7	11.7	-84.9	42.3	27.30709	0.782	-96.2	70.4	37.2	40.1	30.6	59.05504	18-19					
20	-15.553	-17.494	621.57289	-44.6	13.6	-87.2	45.4	28.51708	0.730	-102.2	71.1	38.2	45.2	27.8	65.35231	19-20					
21	-15.423	-19.700	588.38721	-37.5	11.0	-86.1	48.5	27.33598	0.781	-101.0	69.0	43.3	40.2	20.6	64.50418	20-21					
22	-15.326	-21.698	565.27647	-28.7	8.4	-85.1	51.7	26.35907	0.823	-100.1	67.0	48.6	36.0	13.4	58.42568	21-22					
23	-15.256	-23.543	550.59099	-18.1	5.9	-84.3	55.0	25.53576	0.858	-99.3	65.3	53.8	33.0	6.5	53.94515	22-23					
24	-15.206	-25.272	543.12509	-6.1	3.3	-83.5	58.4	24.83268	0.885	-98.6	63.6	59.0	31.3	-0.3	50.56841	23-24					
25	-13.384	-25.363	517.51673	-7.8	3.0	-82.6	55.4	24.00974	0.932	-94.4	63.3	58.5	24.2	1.9	55.27131	24-25					
26	-11.700	-25.443	499.64688	-10.9	2.8	-81.7	52.2	23.30831	0.972	-90.1	63.0	58.4	17.2	3.3	51.03997	25-26					
27	-10.125	-25.514	488.52590	-17.8	2.6	-80.9	47.4	22.57980	0.995	-85.9	62.7	58.5	10.4	3.7	47.76346	26-27					
28	-8.824	-25.570	483.71158	-37.3	2.4	-80.3	45.7	21.60312	0.971	-82.2	62.5	58.9	5.1	3.6	39.44085	27-28					

RA-VII CAMERA FA

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JULY 31, 1964 13 HR 22 MIN 21 SEC 505 MS TAB NO 159 ATLAS PHOTO NO 159 POD SEQUENCE NO 324

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				207.294		470.95178	-8.023	-26.191	2206.407	2.373	-67.859	115.722				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.792	-20.241	520.45324	-33.2	6.2	-83.1	48.8	24.28341	0.898	-93.6	67.9	41.5	28.6	25.8	0.	0-1
2	-11.599	-22.132	505.31407	-44.6	6.5	-82.3	45.4	24.01471	0.913	-90.2	66.2	47.6	24.1	17.4	61.28774	1-2
3	-10.064	-23.897	482.32827	-44.6	4.2	-81.0	45.4	22.71593	0.979	-85.5	64.3	53.2	14.1	10.7	70.12816	2-3
4	-9.983	-22.313	493.33099	-58.6	5.8	-81.1	42.1	23.33303	0.946	-85.1	65.8	47.8	19.6	17.7	47.29737	3-4
5	-9.896	-20.621	511.03923	-66.4	7.4	-81.1	39.0	24.04766	0.908	-84.7	67.5	42.5	25.9	24.8	50.55248	4-5
6	-11.562	-20.372	524.10730	-54.1	8.3	-82.6	42.2	24.79071	0.873	-90.2	67.9	42.2	29.6	24.6	51.00549	5-6
7	-13.355	-20.075	544.90757	-44.7	9.5	-84.2	45.4	25.66319	0.832	-95.6	68.4	42.5	34.5	23.2	54.99629	6-7
8	-13.333	-21.920	524.55559	-35.2	7.3	-83.7	48.5	24.80966	0.872	-95.2	66.6	47.9	29.7	16.0	54.37007	7-8
9	-13.324	-23.634	511.75932	-23.0	5.2	-83.1	51.7	24.08153	0.906	-94.8	64.9	53.3	26.1	6.9	50.50707	8-9
10	-11.639	-23.775	493.60499	-30.7	4.6	-82.0	48.6	23.34810	0.946	-90.1	64.6	53.0	19.7	10.3	51.20687	9-10
11	-10.064	-23.897	482.32827	-44.6	4.2	-81.0	45.4	22.71593	0.979	-85.5	64.3	53.2	14.1	10.7	47.83136	10-11
12	-8.870	-25.451	472.50166	-37.9	2.4	-80.3	45.6	21.10615	0.972	-82.2	62.6	58.9	5.2	3.7	58.85665	11-12
13	-8.765	-23.991	477.45498	-66.7	3.9	-80.2	43.8	22.17297	0.997	-81.6	64.1	53.7	10.7	10.3	43.81481	12-13
14	-8.651	-22.450	488.08681	-75.5	5.3	-80.1	39.2	22.81446	0.970	-80.8	65.6	48.4	17.2	17.1	46.25420	13-14
15	-8.526	-20.808	505.14455	-79.5	6.6	-79.9	36.1	23.48544	0.932	-80.0	67.2	43.1	24.0	24.0	49.34505	14-15
16	-8.388	-19.034	529.53799	-81.8	8.0	-79.6	33.1	24.26918	0.886	-79.0	68.9	38.0	31.0	30.9	53.31317	15-16
17	-9.802	-18.789	536.44014	-71.3	8.9	-81.1	36.0	24.88595	0.861	-84.1	69.3	37.2	32.6	31.9	43.47160	16-17
18	-11.528	-18.457	551.09724	-60.6	10.1	-82.9	39.2	25.70689	0.826	-90.2	69.7	36.8	35.7	31.9	53.18025	17-18
19	-13.391	-18.057	574.11308	-51.8	11.6	-84.9	42.3	26.67975	0.783	-96.2	70.3	37.2	40.0	30.5	57.67706	18-19
20	-15.442	-17.563	607.14036	-44.7	13.5	-87.2	45.4	27.85493	0.731	-102.2	71.0	38.2	45.1	27.7	63.76629	19-20
21	-15.315	-19.716	574.80022	-37.6	10.9	-86.1	48.4	26.70468	0.782	-101.0	68.9	43.3	40.1	20.6	62.97074	20-21
22	-15.221	-21.666	552.22523	-28.8	8.4	-85.2	51.5	25.75040	0.824	-100.1	67.1	48.6	36.0	13.5	57.07565	21-22
23	-15.152	-23.468	537.83157	-18.3	5.9	-84.4	54.7	24.94389	0.859	-99.3	65.3	53.8	32.9	6.6	52.71031	22-23
24	-15.103	-25.157	530.45342	-6.3	3.3	-83.6	58.0	24.25322	0.886	-98.6	63.7	59.0	31.2	-0.2	49.40523	23-24
25	-13.324	-25.247	505.52090	-8.1	3.0	-82.6	55.0	23.45318	0.933	-94.4	63.4	58.5	24.2	2.0	53.94877	24-25
26	-11.680	-25.325	488.09642	-11.3	2.8	-81.7	52.0	22.76952	0.972	-90.1	63.1	58.4	17.2	3.4	49.84724	25-26
27	-10.141	-25.395	477.22948	-18.3	2.6	-80.9	47.2	22.06161	0.995	-85.9	62.8	58.5	10.5	3.9	46.65985	26-27
28	-8.870	-25.451	472.50166	-37.9	2.4	-80.3	45.6	21.10615	0.972	-82.2	62.6	58.9	5.2	3.7	38.53083	27-28

JULY 31, 1964 13 HR 22 MIN 26 SEC 625 MS TAB NO 160 ATLAS PHOTO NO 160 POD SEQUENCE NO 326

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
				202.174		459.68854	-8.074	-26.082	2195.144	2.378	-67.785	115.705				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.785	-20.255	508.06603	-33.4	6.2	-83.1	48.6	23.71302	0.898	-93.6	67.9	41.5	28.6	25.8	0.	0-1
2	-11.580	-22.089	493.46776	-44.7	6.5	-82.3	45.3	23.45172	0.913	-90.2	66.2	47.6	24.1	17.4	59.58726	1-
3	-10.081	-23.813	470.96626	-44.7	4.2	-81.0	45.3	22.18082	0.978	-85.5	64.4	53.2	14.2	10.8	68.49829	2-3
4	-10.002	-22.266	481.76035	-58.6	5.8	-81.1	42.1	22.78575	0.946	-85.1	65.9	47.8	19.7	17.7	46.19722	3-4
5	-9.917	-20.614	499.07401	-66.4	7.4	-81.1	39.1	23.48459	0.907	-84.7	67.5	42.5	25.9	24.8	49.37491	4-5
6	-11.544	-20.370	511.83913	-54.1	8.3	-82.6	42.2	24.21043	0.874	-90.2	67.9	42.2	29.6	24.6	49.81220	5-6
7	-13.294	-20.081	532.10946	-44.7	9.5	-84.2	45.3	25.06045	0.833	-95.6	68.3	42.5	34.4	23.2	53.69065	6-7
8	-13.273	-21.882	512.22363	-35.4	7.3	-83.7	48.3	24.22638	0.873	-95.2	66.6	47.9	29.7	16.1	53.09685	7-8
9	-13.264	-23.555	499.67796	-23.2	5.2	-83.2	51.5	23.51300	0.906	-94.7	65.0	53.3	26.1	9.0	49.33002	8-9
10	-11.619	-23.693	481.98242	-30.9	4.7	-82.1	48.4	22.79835	0.945	-90.1	64.6	53.0	19.7	10.4	49.98853	9-10
11	-10.081	-23.813	470.96626	-44.7	4.2	-81.0	45.3	22.18082	0.978	-85.5	64.4	53.2	14.2	10.8	46.70607	10-11
12	-8.915	-25.332	461.27415	-38.5	2.5	-80.3	45.5	20.60832	0.972	-82.2	62.8	58.9	5.3	3.8	57.48049	11-12
13	-8.813	-23.906	466.18078	-66.6	3.9	-80.2	43.8	21.65955	0.998	-81.6	64.1	53.7	10.8	10.4	42.78491	12-13
14	-8.702	-22.401	476.60999	-75.3	5.3	-80.1	39.3	22.27792	0.970	-80.8	65.6	48.4	17.3	17.2	45.17528	13-14
15	-8.579	-20.796	493.28696	-79.4	6.7	-79.9	36.2	22.93404	0.932	-80.0	67.2	43.1	24.1	24.0	48.19257	14-15
16	-8.444	-19.064	517.08939	-81.7	8.0	-79.6	33.3	23.69856	0.887	-79.0	68.9	38.0	30.9	30.9	52.05246	15-16
17	-9.825	-18.824	523.85952	-71.2	8.9	-81.0	36.1	24.30232	0.862	-84.1	69.2	37.2	32.6	31.9	42.45557	16-17
18	-11.510	-18.501	538.16892	-60.6	10.1	-82.9	39.2	25.10388	0.827	-90.2	69.7	36.9	35.7	31.9	51.93178	17-18
19	-13.330	-18.112	560.58419	-51.8	11.6	-84.9	42.3	26.05110	0.784	-96.2	70.2	37.2	39.9	30.5	56.29714	18-19
20	-15.329	-17.633	592.68543	-44.7	13.4	-87.2	45.3	27.19175	0.733	-102.1	70.9	38.2	45.0	27.7	62.18138	19-20
21	-15.206	-19.732	561.18845	-37.6	10.9	-86.1	48.3	26.07223	0.783	-101.0	68.9	43.3	40.0	20.6	61.43674	20-21
22	-15.115	-21.635	539.15038	-28.9	8.4	-85.2	51.3	25.14063	0.825	-100.1	67.1	48.6	35.9	13.6	55.72310	21-22
23	-15.047	-23.394	525.05151	-18.5	5.8	-84.4	54.4	24.35107	0.859	-99.3	65.4	53.8	32.8	6.7	51.47271	22-23
24	-14.998	-25.042	517.78563	-6.6	3.3	-83.7	57.7	23.67303	0.887	-98.6	63.8	59.0	31.1	-0.1	48.23988	23-24
25	-13.263	-25.130	493.50611	-8.4	3.0	-82.7	54.7	22.89575	0.933	-94.4	63.5	58.5	24.1	2.2	52.62606	24-25
26	-11.659	-25.207	476.52633	-11.7	2.8	-81.8	51.7	22.22981	0.972	-90.1	63.2	58.4	17.2	3.5	48.65313	25-26
27	-10.156	-25.277	465.91410	-18.9	2.6	-80.9	47.0	21.54244	0.995	-85.9	62.9	58.5	10.6	4.0	45.55423	26-27
28	-8.915	-25.332	461.27415	-38.5	2.5	-80.3	45.5	20.60832	0.972	-82.2	62.8	58.9	5.3	3.8	37.61934	27-28

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JULY 31, 1964 13 HR 22 MIN 31 SEC 745 MS

TAB NO 161

ATLAS PHOTO NO 161

POD SEQUENCE NO 328

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LOM	R	V	PTH	AZ				
PHOTO DATA				197.054		448.40811	-8.127	-25.972	2183.863	2.383	-67.710	115.687				
PT	LAT	LOM	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.779	-20.269	495.65719	-33.5	6.1	-83.1	48.5	23.14122	0.898	-93.6	67.9	41.6	28.5	25.7	0.	0-1
2	-11.561	-22.047	481.59084	-44.8	6.5	-82.3	45.2	22.88727	0.913	-90.1	66.2	47.6	24.1	17.5	57.90368	1-2
3	-10.098	-23.730	459.57910	-44.9	4.2	-81.0	45.2	21.64453	0.978	-85.5	64.4	53.2	14.2	10.8	66.86310	2-3
4	-10.021	-22.220	470.16033	-58.6	5.8	-81.1	42.1	22.23708	0.946	-85.1	65.9	47.8	19.7	17.8	45.09365	3-4
5	-9.938	-20.607	487.07589	-66.3	7.4	-81.1	39.1	22.91998	0.907	-84.7	67.5	42.5	25.9	24.8	48.19336	4-5
6	-11.526	-20.369	499.53672	-54.1	8.3	-82.6	42.2	23.62852	0.874	-90.2	67.9	42.2	29.6	24.6	48.61526	5-6
7	-13.233	-20.088	519.27728	-44.8	9.4	-84.3	45.2	23.45610	0.833	-95.6	68.3	42.5	34.4	23.2	52.38219	6-7
8	-13.213	-21.845	499.86123	-35.5	7.3	-83.7	48.2	23.64166	0.873	-95.2	66.6	47.9	29.7	16.1	51.81952	7-8
9	-13.203	-23.478	487.57072	-23.4	5.2	-83.2	51.3	22.94325	0.906	-94.7	65.0	53.3	26.1	9.1	48.14930	8-9
10	-11.599	-23.613	470.33367	-31.1	4.7	-82.1	48.3	22.24735	0.945	-90.1	64.7	53.1	19.8	10.4	48.76813	9-10
11	-10.098	-23.730	459.57910	-44.9	4.2	-81.0	45.2	21.64453	0.978	-85.5	64.4	53.2	14.2	10.8	45.57801	10-11
12	-8.961	-25.212	450.02773	-39.0	2.5	-80.2	45.4	20.10952	0.972	-82.2	62.9	58.9	5.5	3.9	56.10075	11-12
13	-8.861	-23.821	454.88305	-66.4	3.9	-80.2	43.8	21.13749	0.998	-81.6	64.2	53.7	10.9	10.5	41.75270	12-13
14	-8.752	-22.352	465.10564	-75.2	5.3	-80.0	39.3	21.74010	0.970	-80.8	65.7	48.4	17.3	17.2	44.09315	13-14
15	-8.632	-20.786	481.39847	-79.2	6.7	-79.8	36.3	22.38122	0.932	-80.0	67.2	43.1	24.1	24.1	47.03639	14-15
16	-8.500	-19.095	504.60757	-81.6	8.0	-79.6	33.5	23.12643	0.887	-79.0	68.9	38.0	30.9	30.9	50.78810	15-16
17	-9.848	-18.861	511.24351	-71.1	8.9	-81.0	36.2	23.71706	0.862	-84.1	69.2	37.2	32.5	31.9	41.43661	16-17
18	-11.493	-18.545	525.20395	-60.6	10.1	-82.9	39.3	24.49915	0.827	-90.2	69.6	36.9	35.6	31.8	50.67958	17-18
19	-13.268	-18.167	547.01942	-51.8	11.5	-84.9	42.3	25.42078	0.785	-96.2	70.2	37.2	39.8	30.4	54.91439	18-19
20	-15.217	-17.703	578.19923	-44.8	13.3	-87.2	45.2	26.52714	0.735	-102.1	70.8	38.2	44.8	27.6	60.59646	19-20
21	-15.098	-19.748	547.54570	-37.7	10.8	-86.1	48.1	25.43834	0.784	-101.0	68.9	43.3	39.9	20.6	59.90024	20-21
22	-15.008	-21.605	526.04750	-29.1	8.5	-85.3	51.1	24.82955	0.876	-100.1	67.1	48.6	35.8	13.6	54.36689	21-22
23	-14.942	-23.320	512.24803	-18.6	5.8	-84.5	54.2	23.75718	0.860	-99.3	65.4	53.8	32.8	6.8	50.53557	22-23
24	-14.894	-24.928	505.06027	-6.8	3.4	-83.8	57.3	23.09204	0.888	-98.6	63.9	59.0	31.0	0.1	47.07193	23-24
25	-13.202	-25.014	481.47094	-8.7	3.1	-82.8	54.4	22.33738	0.933	-94.4	63.6	58.6	24.1	2.3	51.30326	24-25
26	-11.637	-25.090	464.93519	-12.0	2.8	-81.8	51.5	21.68911	0.972	-90.1	63.3	58.4	17.2	3.6	47.45758	25-26
27	-10.172	-25.158	454.57840	-19.4	2.6	-81.0	46.8	21.02218	0.995	-85.9	63.1	58.5	10.6	4.1	44.44651	26-27
28	-8.961	-25.212	450.02773	-39.0	2.5	-80.2	45.4	20.10952	0.972	-82.2	62.9	58.9	5.5	3.9	36.75595	27-28

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TAB NO 162

ATLAS PHOTO NO 162

POD SEQUENCE NO 330

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LOM	R	V	PTH	AZ				
PHOTO DATA				191.935		437.11105	-8.180	-25.861	2172.566	2.388	-67.635	115.670				
PT	LAT	LOM	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.772	-20.283	483.22731	-33.7	6.1	-83.2	48.3	22.56806	0.898	-93.6	67.9	41.6	28.4	25.7	0.	0-
2	-11.542	-22.005	469.68463	-44.9	6.5	-82.4	45.1	22.32144	0.913	-90.1	66.3	47.6	24.1	17.5	56.23442	1-2
3	-10.115	-23.647	448.16758	-45.0	4.3	-81.0	45.1	21.10709	0.978	-85.5	64.5	53.2	14.3	10.9	65.22300	2-3
4	-10.040	-22.174	458.53214	-58.6	5.8	-81.1	42.1	21.68708	0.946	-85.1	66.0	47.9	19.7	17.8	43.98679	3-4
5	-9.959	-20.600	475.04659	-66.3	7.4	-81.1	39.1	22.35390	0.907	-84.7	67.5	42.5	26.0	24.8	47.00817	4-5
6	-11.507	-20.368	487.20189	-54.2	8.3	-82.6	42.2	23.04508	0.874	-90.2	67.9	42.2	29.6	24.6	47.41521	5-6
7	-13.172	-20.095	506.41309	-44.8	9.4	-84.3	45.1	23.85024	0.833	-95.6	68.3	42.5	34.3	23.2	51.07105	6-7
8	-13.152	-21.808	487.46975	-35.6	7.3	-83.8	48.0	23.05557	0.873	-95.2	66.7	47.9	29.6	16.1	50.53843	7-8
9	-13.143	-23.400	475.43853	-23.6	5.2	-83.3	51.0	22.37233	0.906	-94.7	65.1	53.3	26.1	9.2	46.96514	8-9
10	-11.578	-23.532	458.65964	-31.3	4.7	-82.1	48.1	21.69517	0.945	-90.1	64.8	53.1	19.8	10.5	47.54548	9-10
11	-10.115	-23.647	448.16758	-45.0	4.3	-81.0	45.1	21.10709	0.978	-85.5	64.5	53.2	14.3	10.9	44.44759	10-11
12	-9.006	-25.093	438.76289	-39.6	2.5	-80.2	45.3	19.60979	0.972	-82.2	63.0	58.9	5.6	4.0	54.71766	11-12
13	-8.908	-23.736	443.56255	-66.3	3.9	-80.2	43.7	20.61765	0.998	-81.6	64.3	53.7	11.0	10.6	40.71823	12-13
14	-8.802	-22.303	453.57491	-75.0	5.3	-80.0	39.4	21.20106	0.970	-80.8	65.7	48.4	17.4	17.3	43.00801	13-14
15	-8.685	-20.775	469.48077	-79.1	6.7	-79.8	36.4	21.82705	0.932	-80.0	67.2	43.1	24.1	24.1	45.87684	14-15
16	-8.556	-19.127	492.09479	-81.4	8.0	-79.5	33.6	22.55289	0.887	-79.0	68.8	38.0	30.9	30.8	49.52049	15-16
17	-9.871	-18.898	498.59445	-71.1	8.9	-81.0	36.3	23.13026	0.862	-84.1	69.2	37.2	32.5	31.8	40.41468	16-17
18	-11.475	-18.590	512.20484	-60.6	10.1	-82.8	39.3	23.89284	0.828	-90.2	69.6	36.9	35.6	31.8	49.42410	17-18
19	-13.205	-18.223	533.42160	-51.9	11.5	-84.9	42.3	24.78892	0.786	-96.2	70.1	37.2	39.7	30.4	53.52940	18-19
20	-15.104	-17.774	563.68501	-44.8	13.2	-87.1	45.1	25.86125	0.736	-102.1	70.8	38.2	44.7	27.5	59.01192	19-20
21	-14.989	-19.765	533.87413	-37.8	10.8	-86.1	48.0	24.80312	0.786	-101.0	68.8	43.3	39.8	20.6	58.36198	20-21
22	-14.902	-21.575	512.91813	-29.2	8.3	-85.3	50.9	23.91726	0.827	-100.1	67.1	48.6	35.7	13.7	53.00741	21-22
23	-14.837	-23.247	499.42215	-18.8	5.8	-84.6	53.9	23.16226	0.861	-99.3	65.5	53.8	32.7	6.9	48.98720	22-23
24	-14.790	-24.813	492.33785	-7.0	3.4	-83.9	57.0	22.51029	0.888	-98.6	64.0	59.0	30.9	0.2	45.90152	23-24
25	-13.142	-24.898	469.41585	-9.0	3.1	-82.8	54.1	21.77808	0.934	-94.4	63.7	58.6	24.0	2.4	49.98029	24-25
26	-11.616	-24.973	453.32353	-12.4	2.9	-81.9	51.2	21.14746	0.972	-90.1	63.4	58.4	17.2	3.7	46.26024	25-26
27	-10.187	-25.040	443.22283	-19.9	2.7	-81.0	46.6	20.50086	0.995	-85.9	63.2	58.5	10.7	4.2	43.33697	26-27
28	-9.006	-25.093	438.76289	-39.6	2.5	-80.2	45.3	19.60979	0.972	-82.2	63.0	58.9	5.6	4.0	35.79097	27-28

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TAB NO 163 ATLAS PHOTO NO 163 POD SEQUENCE NO 332
 JULY 31, 1964 13 HR 22 MIN 41 SEC 985 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				186.815		425.79636	-8.233	-25.749	2161.252	2.393	-67.559	115.652				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.766	-20.297	470.77533	-33.8	6.1	-83.2	48.2	21.99359	0.899	-93.6	67.9	41.7	28.4	25.6	0.	0-1
2	-11.523	-21.963	457.75019	-45.0	6.5	-82.4	45.0	21.75426	0.912	-90.1	66.3	47.6	24.2	17.6	54.57255	1-2
3	-10.132	-23.564	436.73183	-45.2	4.3	-81.0	45.0	20.56850	0.978	-85.5	64.6	53.2	14.4	11.0	63.57827	2-3
4	-10.058	-22.128	446.87679	-58.6	5.9	-81.1	42.0	21.13580	0.945	-85.1	66.0	47.9	19.8	17.9	42.87698	3-4
5	-9.979	-20.594	462.98806	-66.3	7.4	-81.1	39.2	21.78645	0.907	-84.7	67.5	42.5	26.0	24.8	45.81975	4-5
6	-11.489	-20.368	474.83681	-54.2	8.3	-82.6	42.1	22.46021	0.874	-90.2	67.9	42.2	29.6	24.6	46.21219	5-6
7	-13.111	-20.102	493.51931	-44.9	9.4	-84.3	45.0	23.24299	0.834	-95.6	68.3	42.5	34.3	23.2	49.75751	6-7
8	-13.091	-21.771	475.05038	-35.7	7.3	-83.8	47.9	22.46815	0.873	-95.1	66.7	47.9	29.6	16.2	49.25420	7-8
9	-11.082	-23.323	443.78160	-23.8	5.2	-83.3	50.8	21.80025	0.906	-94.7	65.2	53.3	26.1	9.3	45.77780	8-9
10	-11.558	-23.452	446.96043	-31.5	4.7	-82.2	47.9	21.14179	0.945	-90.1	64.9	53.1	19.8	10.6	46.32082	9-10
11	-10.132	-23.564	436.73183	-45.2	4.3	-81.0	45.0	20.56850	0.978	-85.5	64.6	53.2	14.4	11.0	43.31454	10-11
12	-9.052	-24.974	427.47894	-40.0	2.5	-80.2	45.2	19.10910	0.972	-82.2	63.1	58.9	5.7	4.1	53.33122	11-12
13	-8.956	-23.651	432.21946	-66.2	4.0	-80.1	43.7	20.09649	0.999	-81.6	64.4	53.7	11.0	10.7	39.68154	12-13
14	-8.852	-22.254	442.01874	-74.9	5.4	-80.0	39.4	20.66082	0.969	-80.8	65.8	48.4	17.4	17.3	41.92007	13-14
15	-8.738	-20.765	457.53573	-79.0	6.7	-79.8	36.6	21.27162	0.932	-80.0	67.2	43.2	24.1	24.1	44.71430	14-15
16	-8.613	-19.159	479.55414	-81.3	8.1	-79.5	33.8	21.97808	0.887	-79.0	68.8	38.0	30.8	30.8	48.25041	15-16
17	-9.894	-18.935	485.91562	-71.0	8.9	-81.0	36.4	22.54208	0.863	-84.1	69.1	37.2	32.5	31.8	39.39012	16-17
18	-11.457	-18.636	499.17519	-60.6	10.1	-82.8	39.4	23.28509	0.828	-90.2	69.6	36.9	35.5	31.7	48.16570	17-18
19	-13.143	-18.279	519.79469	-51.9	11.4	-84.9	42.2	24.15571	0.787	-96.2	70.1	37.2	39.7	30.3	52.14327	18-19
20	-14.991	-17.845	549.14727	-44.9	13.1	-87.1	45.1	25.19427	0.738	-102.1	70.7	38.2	44.6	27.5	57.42838	19-20
21	-14.880	-19.783	520.17662	-37.9	10.7	-86.2	47.9	24.16670	0.787	-101.0	68.8	43.3	39.7	20.6	56.82310	20-21
22	-14.795	-21.544	499.76375	-29.3	8.3	-85.4	50.7	23.30379	0.827	-100.1	67.1	48.6	35.7	13.7	47.73995	21-22
23	-14.732	-23.173	486.57416	-19.0	5.8	-84.7	53.6	22.56631	0.861	-99.3	65.5	53.8	32.6	6.9	47.73995	22-23
24	-14.685	-24.699	479.59774	-7.3	3.4	-84.0	56.6	21.92773	0.889	-98.6	64.1	59.0	30.8	0.4	44.72875	23-24
25	-13.080	-24.782	457.34021	-9.3	3.1	-82.9	53.8	21.21784	0.934	-94.4	63.8	58.6	24.0	2.5	48.65725	24-25
26	-11.594	-24.856	441.69063	-12.8	2.9	-81.9	51.0	20.60481	0.972	-90.1	63.5	58.4	17.2	3.8	45.06150	25-26
27	-10.202	-24.922	431.86674	-20.4	2.7	-81.0	46.4	19.97848	0.995	-85.9	63.3	58.5	10.7	4.3	42.22523	26-27
28	-9.052	-24.974	427.47894	-40.0	2.5	-80.2	45.2	19.10910	0.972	-82.2	63.1	58.9	5.7	4.1	34.87412	27-28

TAB NO 164 ATLAS PHOTO NO 164 POD SEQUENCE NO 334
 JULY 31, 1964 13 HR 22 MIN 47 SEC 105 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				181.695			414.46487	-8.287	-25.635	2149.920	2.398	-67.483	115.634			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.760	-20.310	458.30199	-34.0	6.1	-83.3	48.0	21.41838	0.899	-93.6	67.9	41.7	28.3	25.6	0	0-1
2	-11.503	-21.920	445.80147	-45.1	6.5	-82.4	44.9	21.18641	0.912	-90.1	66.4	47.6	24.2	17.6	52.87745	1-2
3	-10.149	-23.480	425.27975	-45.3	4.3	-81.0	44.9	20.02915	0.977	-85.5	64.7	53.2	14.4	11.1	61.93232	2-3
4	-10.077	-22.081	435.20745	-58.6	5.9	-81.1	42.0	20.58386	0.945	-85.1	66.1	47.9	19.8	17.9	41.76637	3-4
5	-10.000	-20.587	450.91983	-66.2	7.4	-81.0	39.2	21.21853	0.907	-84.7	67.5	42.5	26.0	24.8	46.63181	4-5
6	-11.470	-20.366	462.46218	-54.2	8.3	-82.6	42.1	21.87489	0.874	-90.2	67.9	42.2	29.5	24.6	45.00826	5-6
7	-13.049	-20.108	480.61842	-45.0	9.3	-84.3	44.9	22.63540	0.834	-95.6	68.3	42.5	34.2	23.2	48.44429	6-7
8	-13.030	-21.733	462.61831	-35.9	7.3	-83.8	47.7	21.88014	0.874	-95.1	66.7	47.9	29.6	16.2	47.97119	7-8
9	-13.021	-23.244	451.10891	-24.0	5.2	-83.4	50.6	21.22742	0.907	-94.7	65.3	53.3	26.0	9.4	44.59000	8-9
10	-11.537	-23.370	435.24441	-31.8	4.7	-82.2	47.8	20.58761	0.945	-90.1	65.0	53.1	19.9	10.7	45.09519	9-10
11	-10.149	-23.480	425.27975	-45.3	4.3	-81.0	44.9	20.02915	0.977	-85.5	64.7	53.2	14.4	11.1	42.17988	10-11
12	-9.097	-24.854	416.17907	-40.6	2.6	-80.2	45.1	18.60774	0.972	-82.2	63.2	58.9	5.8	4.3	51.94294	11-12
13	-9.003	-23.565	420.86136	-66.1	4.0	-80.1	43.7	19.57477	0.999	-81.6	64.5	53.7	11.1	10.8	38.64368	12-13
14	-8.902	-22.204	430.44994	-74.7	5.4	-80.0	39.4	20.11999	0.969	-80.8	65.8	48.4	17.5	17.4	40.83150	13-14
15	-8.791	-20.754	445.58215	-78.8	6.8	-79.8	36.6	20.71577	0.931	-80.0	67.2	43.2	24.1	24.1	43.55228	14-15
16	-8.669	-19.189	467.01188	-81.2	8.1	-79.5	33.9	21.40317	0.888	-79.0	68.8	38.0	30.8	30.8	46.98307	15-16
17	-9.917	-18.971	473.23428	-71.0	8.9	-81.0	36.5	21.95378	0.863	-84.1	69.1	37.2	32.4	31.7	38.36546	16-17
18	-11.439	-18.680	486.14408	-60.6	10.1	-82.8	39.4	22.67728	0.829	-90.2	69.5	36.9	35.5	31.7	46.90743	17-18
19	-13.080	-18.333	506.17052	-51.9	11.4	-84.9	42.2	23.52262	0.788	-96.2	70.0	37.2	39.6	30.3	50.75709	18-19
20	-14.878	-17.913	534.62186	-44.9	13.0	-87.1	45.0	24.52786	0.739	-102.1	70.6	38.2	44.5	27.4	55.85060	19-20
21	-14.770	-19.798	506.47824	-38.0	10.6	-86.2	47.7	23.53023	0.788	-101.0	68.8	43.3	39.6	20.6	55.29146	20-21
22	-14.688	-21.513	486.60105	-29.5	8.2	-85.4	50.5	22.68993	0.828	-100.1	67.1	48.6	35.6	13.8	50.28590	21-22
23	-14.626	-23.098	473.71391	-19.2	5.8	-84.7	53.3	21.96978	0.862	-99.3	65.6	53.8	32.6	7.1	46.49291	22-23
24	-14.580	-24.583	466.84379	-7.5	3.4	-84.1	56.3	21.34451	0.890	-98.6	64.2	59.0	30.8	0.5	43.55520	23-24
25	-13.019	-24.665	445.24764	-9.6	3.1	-83.0	53.5	20.65679	0.934	-94.4	63.9	58.6	24.0	2.7	47.33435	24-25
26	-11.572	-24.737	430.03989	-13.2	2.9	-82.0	50.7	20.06133	0.972	-90.1	63.6	58.4	17.3	4.0	43.86154	25-26
27	-10.217	-24.802	420.45338	-21.0	2.7	-81.0	46.3	19.45531	0.996	-85.9	63.4	58.5	10.8	4.4	41.11185	26-27
28	-9.097	-24.854	416.17907	-40.6	2.6	-80.2	45.1	18.60774	0.972	-82.2	63.2	58.9	5.8	4.3	33.95583	27-28

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JULY 31, 1964 13 HR 22 MIN 52 SEC 225 MS

TAB NO 165

ATLAS PHOTO NO 165

POD SEQUENCE NO 336

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				176.575		403.11554	-8.342	-25.521	2138.571	2.503	-67.505	115.615				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.753	-20.323	445.80620	-34.1	6.1	-83.3	47.8	20.84210	0.899	-93.6	67.8	41.7	28.3	25.5	0.	0-1
2	-11.483	-21.876	433.83040	-45.2	6.5	-82.4	44.8	20.61749	0.912	-90.1	66.4	47.6	24.2	17.6	51.17070	1-2
3	-10.165	-23.395	413.80650	-45.5	4.3	-81.1	44.8	19.48880	0.977	-85.5	64.8	53.2	14.5	11.2	60.28329	2-3
4	-10.095	-22.033	423.51644	-58.6	5.9	-81.1	42.0	20.03089	0.945	-85.1	66.1	47.9	19.9	18.0	40.65374	3-4
5	-10.020	-20.579	438.83083	-66.2	7.4	-81.0	39.3	20.64964	0.907	-84.7	67.5	42.5	26.0	24.8	43.44234	4-5
6	-11.451	-20.364	450.06632	-54.3	8.3	-82.6	42.1	21.28857	0.874	-90.2	67.9	42.2	29.5	24.6	43.80231	5-6
7	-12.987	-20.113	467.69778	-45.1	9.3	-84.3	44.8	22.02689	0.835	-95.6	68.3	42.5	34.2	23.2	47.12977	6-7
8	-12.969	-21.694	450.16477	-36.0	7.3	-83.9	47.6	21.29111	0.874	-95.1	66.7	47.9	29.6	16.3	46.68704	7-8
9	-12.959	-23.165	438.91502	-24.3	5.2	-83.5	50.3	20.65359	0.907	-94.7	65.3	53.3	26.0	9.5	43.50027	8-9
10	-11.516	-23.287	423.50847	-32.0	4.7	-82.2	47.6	20.03240	0.945	-90.1	65.0	53.1	19.9	10.8	43.86791	9-10
11	-10.165	-23.395	413.80650	-45.5	4.3	-81.1	44.8	19.48880	0.977	-85.5	64.8	53.2	14.5	11.2	41.04294	10-11
12	-9.142	-24.732	404.86092	-41.1	2.6	-80.2	44.9	18.10552	0.973	-82.2	63.4	58.9	5.9	4.4	50.55200	11-12
13	-9.051	-23.479	409.48358	-66.0	4.0	-80.1	43.6	19.05206	0.999	-81.6	64.6	53.7	11.2	10.8	37.60402	12-13
14	-8.952	-22.154	418.86098	-74.6	5.4	-80.0	39.4	19.57822	0.969	-80.8	65.9	48.4	17.5	17.4	39.74106	13-14
15	-8.844	-20.742	433.60935	-78.7	6.8	-79.7	36.7	20.15902	0.931	-80.0	67.3	43.2	24.1	24.1	42.38886	14-15
16	-8.724	-19.219	454.45331	-81.1	8.1	-79.4	34.1	20.82750	0.888	-79.0	68.8	38.0	30.8	30.8	45.71563	15-16
17	-9.939	-19.006	460.53524	-70.9	9.0	-81.0	36.6	21.36465	0.863	-84.1	69.1	37.2	32.4	31.7	37.33906	16-17
18	-11.420	-18.723	473.09531	-60.6	10.0	-82.8	39.4	22.06864	0.829	-90.2	69.5	36.9	35.4	31.6	45.64760	17-18
19	-11.017	-18.387	492.53141	-52.0	11.3	-84.9	42.2	22.88884	0.789	-96.2	70.0	37.2	39.5	30.2	49.37158	18-19
20	-14.765	-17.982	520.08884	-45.0	12.9	-87.1	44.9	23.86110	0.741	-102.1	70.5	38.2	44.3	27.4	54.27592	19-20
21	-14.660	-19.813	492.76488	-38.1	10.6	-86.2	47.6	22.33207	0.789	-101.0	68.8	43.3	39.5	20.6	53.76274	20-21
22	-14.581	-21.481	473.42048	-29.6	8.2	-85.5	50.3	22.07523	0.829	-100.1	67.1	46.6	35.5	13.8	48.92618	21-22
23	-14.520	-23.023	460.83550	-19.4	5.8	-84.8	53.1	21.37240	0.863	-99.3	65.7	53.8	32.5	7.2	45.24438	22-23
24	-14.474	-24.667	454.07333	-7.8	3.5	-84.2	55.9	20.76053	0.891	-98.6	64.3	59.0	30.7	0.7	42.37997	23-24
25	-12.957	-24.547	433.13553	-9.9	3.2	-83.1	53.2	20.09484	0.934	-94.4	64.0	58.6	23.9	2.8	46.01154	24-25
26	-11.550	-24.618	418.36889	-13.6	2.9	-82.0	50.4	19.51690	0.972	-90.1	63.7	58.4	17.3	4.1	42.66002	25-26
27	-10.231	-24.682	409.04038	-21.5	2.7	-81.0	46.1	18.93119	0.996	-85.8	63.5	58.5	10.8	4.6	39.99640	26-27
28	-9.242	-24.732	404.86092	-41.1	2.6	-80.2	44.8	18.10552	0.973	-82.2	63.4	58.9	5.9	4.4	33.03598	27-28

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TAB NO 166

ATLAS PHOTO NO 166

POD SEQUENCE NO 338

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				171.455		391.74890	-8.397	-25.405	2127.204	2.408	-67.327	115.596				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.747	-20.336	433.28855	-34.3	6.1	-83.3	47.6	20.26445	0.899	-93.6	67.8	41.8	28.2	25.5	0.	0-
2	-11.463	-21.833	421.82981	-45.3	6.5	-82.4	44.7	20.04717	0.912	-90.1	66.4	47.6	24.2	17.7	49.47549	1-2
3	-10.181	-23.310	402.30831	-45.7	4.3	-81.1	44.6	18.94728	0.977	-85.5	64.9	53.2	14.6	11.3	58.62942	2-3
4	-10.113	-21.986	411.79702	-58.7	5.9	-81.1	41.9	19.47657	0.944	-85.1	66.2	47.9	19.9	18.0	39.53790	3-4
5	-10.040	-20.571	426.71082	-66.1	7.5	-81.0	39.3	20.07928	0.907	-84.7	67.5	42.5	26.0	24.8	42.24934	4-5
6	-11.431	-20.362	437.63830	-54.3	8.3	-82.6	42.0	20.70072	0.874	-90.1	67.9	42.2	29.5	24.6	42.59317	5-6
7	-12.925	-20.118	454.74555	-45.1	9.3	-84.4	44.7	21.41688	0.835	-95.6	68.3	42.5	34.1	23.2	45.81279	6-7
8	-12.907	-21.656	437.68208	-36.1	7.3	-83.9	47.4	20.70070	0.874	-95.1	66.8	47.9	29.5	16.3	45.39934	7-8
9	-12.898	-23.086	426.69571	-24.5	5.2	-83.5	50.1	20.07857	0.907	-94.7	65.4	53.3	26.0	9.5	42.20713	8-9
10	-11.495	-23.205	411.74267	-32.2	4.8	-82.2	47.4	19.47596	0.944	-90.1	65.1	53.1	19.9	10.9	42.63840	9-10
11	-10.181	-23.310	402.30831	-45.7	4.3	-81.1	44.6	18.94728	0.977	-85.5	64.9	53.2	14.6	11.3	39.90365	10-11
12	-9.187	-24.611	393.52351	-41.6	2.6	-80.2	44.8	17.60232	0.973	-82.2	63.5	58.9	6.0	4.5	49.15749	11-12
13	-9.098	-23.392	398.08247	-66.0	4.0	-80.1	43.6	18.52796	1.000	-81.5	64.7	53.7	11.3	10.9	36.56208	12-13
14	-9.002	-22.104	407.24540	-74.5	5.4	-79.9	39.5	19.03520	0.968	-80.8	65.9	48.4	17.6	17.5	38.64762	13-14
15	-8.896	-20.730	421.60746	-78.6	6.8	-79.7	36.8	19.60093	0.931	-80.0	67.3	43.1	24.1	24.1	41.22218	14-15
16	-8.780	-19.250	441.86445	-81.0	8.2	-79.4	34.2	20.25046	0.888	-78.9	68.7	38.0	30.8	30.7	44.44523	15-16
17	-9.961	-19.042	447.80387	-70.8	9.0	-80.9	36.7	20.77401	0.863	-84.1	69.0	37.2	32.4	31.7	36.30998	16-17
18	-11.402	-18.767	460.01331	-60.6	10.0	-82.8	39.4	21.45845	0.830	-90.2	69.4	36.9	35.4	31.6	44.38453	17-18
19	-12.954	-18.442	478.86033	-52.0	11.3	-84.9	42.1	22.25357	0.790	-96.2	69.9	37.2	39.4	30.2	47.98366	18-19
20	-14.651	-18.050	505.52903	-45.0	12.9	-87.1	44.8	23.19310	0.742	-102.1	70.5	38.2	44.2	27.3	52.70180	19-20
21	-14.550	-19.829	479.02338	-38.2	10.5	-86.2	47.4	22.25460	0.790	-101.0	68.7	43.3	39.5	20.6	52.23260	20-21
22	-14.473	-21.449	460.21349	-29.7	8.2	-85.5	50.1	21.45931	0.830	-100.1	67.2	46.6	35.4	13.9	47.56345	21-22
23	-14.413	-22.947	447.93430	-19.6	5.8	-84.9	52.8	20.77397	0.863	-99.3	65.7	53.8	32.4	7.3	43.99271	22-23
24	-14.368	-24.351	441.28503	-8.0	3.5	-84.3	55.5	20.17574	0.892	-98.6	64.4	59.0	30.6	0.8	41.20225	23-24
25	-12.895	-24.430	421.00273	-10.2	3.2	-83.1	52.9	19.53193	0.935	-94.4	64.1	58.6	23.9	2.9	44.68845	24-25
26	-11.528	-24.499	406.67649	-14.0	3.0	-82.1	50.2	18.97148	0.972	-90.1	63.9	58.4	17.3	4.2	41.45689	25-26
27	-10.246	-24.562	397.60666	-22.1	2.8	-81.0	45.9	18.40596	0.996	-85.8	63.6	58.5	10.9	4.7	38.87893	26-27
28	-9.187	-24.611	393.52351	-41.6	2.6	-80.2	44.8	17.60232	0.973	-82.2	63.5	58.9	6.0	4.5	32.11425	27-28

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TAB NO 167

ATLAS PHOTO NO 167

POD SEQUENCE NO 340

JULY 31, 1964 13 HR 23 MIN 2 SEC 464 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				166.335			380.36456	-8.452	-25.287	2115.820	2.413	-67.248	115.577			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.741	-20.349	420.74863	-34.5	6.1	-83.4	47.5	19.68546	0.899	-93.6	67.8	41.8	28.1	25.4	0	1
2	-11.442	-21.790	409.80038	-45.4	6.5	-82.5	44.6	19.47548	0.912	-90.1	66.5	47.6	24.2	17.7	47	78821
3	-10.198	-23.225	390.78529	-45.8	4.4	-81.1	44.5	18.40458	0.976	-85.5	65.0	53.2	14.7	11.4	56.97079	2
4	-10.131	-21.939	400.04977	-58.7	5.9	-81.1	41.9	18.92095	0.944	-85.1	66.2	47.9	20.0	18.1	38.41899	3
5	-10.060	-20.564	414.56094	-66.1	7.5	-81.0	39.3	19.50753	0.907	-84.7	67.5	42.5	26.0	24.8	41.05308	4
6	-11.412	-20.361	425.17941	-54.3	8.3	-82.6	42.0	20.11141	0.874	-90.1	67.9	42.2	29.5	24.6	41.18108	5
7	-12.862	-20.124	441.76316	-45.2	9.3	-84.4	44.6	20.80546	0.836	-95.4	68.3	42.5	34.1	23.2	44.49321	6
8	-12.845	-21.618	425.17101	-36.3	7.3	-83.9	47.2	20.10895	0.874	-95.1	66.8	47.9	29.5	16.4	44.10843	7
9	-12.836	-23.007	414.45115	-24.7	5.2	-83.6	49.9	19.50236	0.907	-94.7	65.5	53.3	26.0	9.6	41.01080	8
10	-11.473	-23.123	399.95317	-32.5	4.8	-82.3	47.2	18.91831	0.944	-90.1	65.2	53.1	19.9	11.0	41.40686	9
11	-10.198	-23.225	390.78529	-45.8	4.4	-81.1	44.5	18.40458	0.976	-85.5	65.0	53.2	14.7	11.4	38.76172	10
12	-9.232	-24.490	382.16645	-42.1	2.6	-80.2	44.7	17.09812	0.973	-82.2	63.6	58.9	6.1	4.6	47.75965	11
13	-9.145	-23.305	386.65815	-65.9	4.1	-80.1	43.6	18.00250	1.000	-81.5	64.8	53.7	11.4	11.0	35.51784	12
14	-9.051	-22.053	395.60376	-74.3	5.5	-79.9	39.5	18.90997	0.968	-80.8	66.0	48.4	17.7	17.6	37.55134	13
15	-8.949	-20.719	409.57758	-78.4	6.8	-79.7	36.9	19.04155	0.931	-80.0	67.3	43.1	24.2	24.1	40.05249	14
16	-8.836	-19.280	429.24710	-80.9	8.2	-79.4	34.4	19.67211	0.888	-78.9	68.7	38.0	30.7	30.7	43.17229	15
17	-9.984	-19.079	435.04212	-70.8	9.0	-80.9	36.8	20.18197	0.864	-84.1	69.0	37.2	32.4	31.6	35.27828	16
18	-11.383	-18.811	446.90014	-60.6	10.0	-82.8	39.5	20.84680	0.830	-90.2	69.4	36.9	35.4	31.6	35.27828	17
19	-12.890	-18.496	465.15960	-52.0	11.3	-84.8	42.1	21.61692	0.791	-96.2	69.8	37.2	39.3	30.1	46.59388	18
20	-14.538	-18.118	490.94511	-45.1	12.8	-87.1	44.7	22.52401	0.744	-102.1	70.4	38.2	44.1	27.2	51.12843	19
21	-14.440	-19.844	465.25566	-38.3	10.5	-86.3	47.3	21.61490	0.791	-101.0	68.7	43.3	39.4	20.6	50.70169	20
22	-14.365	-21.417	446.98106	-29.9	8.1	-85.6	49.8	20.84220	0.830	-100.1	67.2	48.6	35.4	13.9	46.19811	21
23	-14.307	-22.872	435.01058	-19.8	5.8	-85.0	52.5	20.17450	0.864	-99.3	65.8	53.8	32.3	7.4	42.73812	22
24	-14.262	-24.235	428.74857	-8.3	3.5	-84.4	55.1	19.59013	0.892	-98.6	64.5	59.0	30.5	1.0	40.02216	23
25	-12.833	-24.312	408.84894	-10.5	3.2	-83.2	52.5	18.96805	0.935	-94.4	64.2	58.6	23.9	3.1	43.36510	24
26	-11.506	-24.380	394.96239	-14.4	3.0	-82.1	49.9	18.42504	0.972	-90.1	64.0	58.4	17.3	4.3	40.25217	25
27	-10.260	-24.441	386.15192	-22.6	2.8	-81.1	45.7	17.87963	0.996	-85.8	63.8	58.5	11.0	4.8	37.75946	26
28	-9.232	-24.490	382.16645	-42.1	2.6	-80.2	44.7	17.09812	0.973	-82.2	63.6	58.9	6.1	4.6	31.19072	27

TAB NO 168

ATLAS PHOTO NO 168

POD SEQUENCE NO 342

JULY 31, 1964 13 HR 23 MIN 7 SEC 584 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				161.215			368.96246	-8.508	-25.169	2104.418	2.418	-67.169	115.558			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.735	-20.362	408.18615	-34.6	6.1	-83.4	47.3	19.10508	0.899	-93.6	67.8	41.9	28.1	25.4	0.	0-1
2	-11.421	-21.747	397.74097	-45.5	6.5	-82.5	44.5	18.90237	0.912	-90.1	66.5	47.6	24.3	17.8	46.11139	1-2
3	-10.214	-23.141	379.23667	-46.0	4.4	-81.1	44.4	17.86069	0.976	-85.5	65.0	53.2	14.7	11.4	55.30732	2-3
4	-10.149	-21.891	388.27361	-58.7	5.9	-81.1	41.8	18.36395	0.944	-85.1	66.3	47.8	20.0	18.1	37.29684	3-4
5	-10.080	-20.557	402.37973	-66.1	7.5	-81.0	39.3	18.93430	0.907	-84.7	67.6	42.5	26.0	24.9	39.85334	4-5
6	-11.392	-20.360	412.68811	-54.4	8.3	-82.6	42.0	19.52057	0.874	-90.1	67.9	42.2	29.5	24.6	40.16570	5-6
7	-12.800	-20.131	428.74898	-45.3	9.2	-84.4	44.5	20.19254	0.836	-95.6	68.2	42.5	34.1	23.2	43.17110	6-7
8	-12.783	-21.580	412.63032	-36.3	7.3	-84.0	47.1	19.51580	0.874	-95.1	66.8	47.9	29.5	16.4	42.81401	7-8
9	-12.773	-22.928	402.18054	-24.9	5.3	-83.6	49.6	18.92493	0.907	-94.7	65.5	53.3	26.0	9.7	39.81107	8-9
10	-11.452	-23.041	388.13714	-32.7	4.8	-82.3	47.0	18.35940	0.944	-90.1	65.3	53.1	20.0	11.0	40.17319	9-10
11	-10.214	-23.141	379.23667	-46.0	4.4	-81.1	44.4	17.86069	0.976	-85.5	65.0	53.2	14.7	11.4	37.61724	10-11
12	-9.276	-24.369	370.78935	-42.6	2.7	-80.2	44.6	16.59289	0.973	-82.2	63.7	58.9	6.3	4.8	46.35820	11-12
13	-9.192	-23.219	375.20984	-65.8	4.1	-80.0	42.1	17.47161	1.000	-81.5	64.9	53.7	11.5	11.1	34.47122	12-13
14	-9.101	-22.003	383.93498	-74.2	5.5	-79.9	39.5	17.94548	0.968	-80.8	66.0	48.4	17.7	17.6	36.45207	13-14
15	-9.001	-20.707	397.51829	-78.3	6.9	-79.7	37.0	18.48080	0.931	-80.0	67.3	43.1	24.2	24.2	38.87953	14-15
16	-8.892	-19.312	416.59935	-80.8	8.2	-79.4	34.5	19.09238	0.889	-78.9	68.7	38.0	30.7	30.7	41.89649	15-16
17	-10.006	-19.115	422.24797	-70.7	9.0	-80.9	36.9	19.58843	0.864	-84.1	69.0	37.2	32.3	31.6	34.24373	16-17
18	-11.364	-18.856	433.75371	-60.6	10.0	-82.8	39.5	20.23359	0.831	-90.2	69.3	36.9	35.3	31.5	41.84916	17-18
19	-12.828	-18.551	451.42702	-52.1	11.2	-84.8	42.1	20.97879	0.792	-96.2	69.8	37.2	39.3	30.1	45.20192	18-19
20	-14.423	-18.187	476.33458	-45.2	12.7	-87.1	44.6	21.85369	0.746	-102.1	70.3	38.2	44.0	27.2	49.55554	19-20
21	-14.329	-19.860	451.45928	-38.4	10.4	-86.3	47.1	20.97390	0.792	-101.0	68.7	43.3	39.3	20.6	49.16950	20-21
22	-14.256	-21.386	433.72181	-30.0	8.1	-85.6	49.6	20.22385	0.831	-100.1	67.2	48.6	35.3	14.0	44.82988	21-22
23	-14.200	-22.797	422.06343	-20.0	5.8	-85.0	52.2	19.57395	0.865	-99.3	65.8	53.8	32.3	7.5	41.48039	22-23
24	-14.156	-24.119	415.65357	-8.6	3.5	-84.5	54.8	19.00367	0.893	-98.6	64.6	59.0	30.4	1.1	38.83950	23-24
25	-12.770	-24.194	396.67365	-10.9	3.2	-83.3	52.2	18.40317	0.935	-94.4	64.3	58.6	23.8	3.2	42.04167	24-25
26	-11.483	-24.261	383.22611	-14.9	3.0	-82.1	49.6	17.87756	0.972	-90.1	64.1	58.4	17.3	4.5	39.04574	25-26
27	-10.275	-24.321	374.67568	-23.2	2.8	-81.1	45.5	17.35214	0.997	-85.8	63.9	58.5	11.0	4.9	36.63768	26-27
28	-9.276	-24.369	370.78935	-42.6	2.7	-80.2	44.6	16.59289	0.973	-82.2	63.7	58.9	6.3	4.8	30.26551	27-28

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JULY 31, 1964 13 HR 23 MIN 12 SEC 704 MS

TAB NO 169

ATLAS PHOTO NO 169

POD SEQUENCE NO 344

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				156.095		357.54239	-8.565	-25.049	2092.998	2.423	-67.088	115.538				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.730	-20.374	395.60100	-34.8	6.1	-83.5	47.1	18.52327	0.899	-93.6	67.8	41.9	28.0	25.3	0.	0-1
2	-11.400	-21.704	385.65058	-45.6	6.5	-82.5	44.4	18.32778	0.912	-90.1	66.6	47.6	24.3	17.8	44.44697	1-2
3	-10.229	-23.056	367.66177	-46.2	4.4	-81.1	44.3	17.31555	0.976	-85.5	65.1	53.2	14.8	11.5	53.63865	2-3
4	-10.167	-21.845	376.46758	-58.7	6.0	-81.1	41.8	17.80555	0.943	-85.1	66.3	47.8	20.1	18.2	36.17131	3-4
5	-10.100	-20.550	390.16597	-66.0	7.5	-81.0	39.4	18.35954	0.906	-84.7	67.6	42.5	26.1	24.9	38.64993	4-5
6	-11.372	-20.359	400.16312	-54.4	8.3	-82.6	41.9	18.92813	0.874	-90.1	67.9	42.2	29.5	24.6	38.94693	5-6
7	-12.736	-20.137	415.70169	-45.4	7.2	-84.4	44.4	19.57806	0.836	-95.6	68.2	42.5	34.0	23.2	41.84633	6-7
8	-12.720	-21.542	400.05905	-36.6	7.2	-84.0	46.9	18.92121	0.875	-95.1	66.9	47.9	29.5	16.5	41.51589	7-8
9	-12.711	-22.849	389.88309	-25.2	5.3	-83.7	49.4	18.36624	0.907	-94.7	65.6	53.3	25.9	9.8	38.60779	8-9
10	-11.430	-22.959	376.29385	-32.9	4.8	-82.3	46.9	17.79921	0.944	-90.1	65.3	53.0	20.0	11.1	38.93718	9-10
11	-10.229	-23.056	367.66177	-46.2	4.4	-81.1	44.3	17.31555	0.976	-85.5	65.1	53.2	14.8	11.5	36.46999	10-11
12	-9.321	-24.247	359.39171	-43.0	2.7	-80.2	44.4	16.08659	0.974	-82.2	63.9	58.9	6.4	4.9	44.95307	11-12
13	-9.239	-23.132	363.73687	-65.7	4.1	-80.0	42.0	16.93733	0.999	-81.5	64.9	53.7	11.6	11.2	33.42219	12-13
14	-9.150	-21.954	372.23813	-74.0	5.5	-79.9	39.5	17.39868	0.967	-80.8	66.1	48.4	17.8	17.7	35.34964	13-14
15	-9.054	-20.697	385.42839	-78.2	6.9	-79.6	37.1	17.91864	0.931	-80.0	67.3	43.1	24.2	24.2	37.70315	14-15
16	-8.948	-19.243	403.91973	-80.6	8.2	-79.3	34.7	18.51119	0.889	-78.9	68.7	38.0	30.7	30.7	40.61755	15-16
17	-10.028	-19.153	409.41996	-70.7	9.0	-80.9	36.9	18.99332	0.864	-84.1	68.9	37.2	32.3	31.6	33.20632	16-17
18	-11.344	-18.901	420.57249	-60.6	10.0	-82.8	39.5	19.61877	0.831	-90.2	69.3	36.9	35.3	31.5	40.57561	17-18
19	-12.762	-18.607	437.66092	-52.1	11.2	-84.8	42.0	20.33909	0.792	-96.2	69.7	37.2	39.2	30.0	43.80753	18-19
20	-14.309	-18.256	461.69577	-45.2	12.6	-87.1	44.5	21.18207	0.747	-102.1	70.2	38.2	43.8	27.1	47.98308	19-20
21	-14.218	-19.876	437.63346	-38.5	10.3	-86.3	47.0	20.33152	0.793	-101.0	68.7	43.3	39.2	20.6	47.63574	20-21
22	-14.148	-21.355	420.43476	-30.4	8.4	-85.7	47.4	19.60471	0.837	-100.1	67.2	48.6	35.2	14.1	47.65847	21-22
23	-14.092	-22.723	409.09210	-20.2	5.8	-85.1	51.9	18.97228	0.865	-99.3	65.9	53.8	32.2	7.0	40.21737	22-23
24	-14.050	-24.003	402.80939	-8.8	3.6	-84.6	54.4	18.41634	0.894	-98.6	64.7	59.0	30.3	1.3	37.65423	23-24
25	-12.707	-24.077	384.47638	-11.2	3.3	-83.4	51.9	17.83727	0.935	-94.4	64.4	58.5	23.8	3.3	40.71766	24-25
26	-11.460	-24.142	371.46712	-15.3	3.0	-82.2	49.4	17.32903	0.972	-90.1	64.2	58.4	17.3	4.6	37.83780	25-26
27	-10.289	-24.201	363.17745	-23.7	2.8	-81.1	45.3	16.82367	0.997	-85.8	64.0	58.5	11.1	5.1	35.51368	26-27
28	-9.321	-24.247	359.39171	-43.0	2.7	-80.2	44.4	16.08659	0.974	-82.2	63.9	58.9	6.4	4.9	29.33831	27-28

JULY 31, 1964 13 HR 23 MIN 17 SEC 824 MS

TAB NO 170

ATLAS PHOTO NO 170

POD SEQUENCE NO 346

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				150.975		346.10416	-8.622	-24.927	2081.559	2.429	-67.007	115.519				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.724	-20.386	382.99288	-35.0	6.1	-83.5	46.9	17.94032	0.899	-93.6	67.8	42.0	27.9	25.3	0.	0-1
2	-11.380	-21.661	373.53341	-45.7	6.6	-82.5	44.3	17.75192	0.911	-90.1	66.6	47.6	24.3	17.9	42.80290	1-2
3	-10.246	-22.972	356.06271	-46.3	4.4	-81.1	44.2	16.76927	0.975	-85.5	65.2	53.2	14.9	11.6	51.96597	2-3
4	-10.185	-21.798	364.63331	-58.7	6.0	-81.0	41.8	17.24581	0.943	-85.1	66.3	47.8	20.2	18.2	35.04245	3-4
5	-10.120	-20.544	377.92078	-66.0	7.5	-81.0	39.4	17.78331	0.906	-84.7	67.6	42.5	26.1	24.9	37.44274	4-5
6	-11.352	-20.359	387.60825	-54.4	8.3	-82.6	41.9	18.33428	0.874	-90.1	67.9	42.2	29.5	24.6	37.72585	5-6
7	-12.673	-20.144	402.62836	-45.5	9.2	-84.4	44.4	18.96235	0.837	-95.6	68.2	42.5	34.0	23.2	40.52059	6-7
8	-12.658	-21.505	387.46431	-36.7	7.2	-84.1	46.7	18.32550	0.875	-95.1	66.9	47.9	29.5	16.5	40.21464	7-8
9	-12.648	-22.770	377.56621	-25.4	5.3	-83.7	49.2	17.76663	0.907	-94.7	65.7	53.3	25.9	9.9	37.40154	8-9
10	-11.408	-22.877	364.42788	-33.2	4.8	-82.4	46.7	17.23793	0.944	-90.1	65.4	53.0	20.0	11.2	37.70049	9-10
11	-10.246	-22.972	356.06271	-46.3	4.4	-81.1	44.2	16.76927	0.975	-85.5	65.2	53.2	14.9	11.6	35.32091	10-11
12	-9.366	-24.126	347.97427	-43.5	2.7	-80.1	44.3	15.57931	0.974	-82.2	64.0	58.9	6.5	5.0	43.54467	11-12
13	-9.287	-23.046	352.23946	-65.6	4.2	-80.0	42.0	16.40192	0.999	-81.5	65.0	53.7	11.7	11.3	32.37055	12-13
14	-9.201	-21.904	360.51288	-73.9	5.6	-79.8	39.6	16.85056	0.967	-80.8	66.2	48.4	17.8	17.7	34.24390	13-14
15	-9.107	-20.686	373.30693	-78.0	6.9	-79.6	37.2	17.35501	0.931	-80.0	67.3	43.1	24.2	24.2	36.52304	14-15
16	-9.004	-19.376	391.20652	-80.5	8.3	-79.3	34.8	17.92846	0.889	-78.9	68.6	38.0	30.7	30.6	39.33506	15-16
17	-10.050	-19.190	396.55858	-70.6	9.0	-80.9	37.0	18.39666	0.865	-84.1	68.9	37.2	32.3	31.5	32.16625	16-17
18	-11.325	-18.947	407.35994	-60.5	10.0	-82.8	39.5	19.00247	0.832	-90.2	69.2	36.9	35.2	31.4	39.30155	17-18
19	-12.698	-18.663	423.86826	-52.1	11.1	-84.8	42.0	19.69816	0.793	-96.2	69.7	37.2	39.1	30.0	42.41257	18-19
20	-14.195	-18.326	447.03991	-45.3	12.5	-87.1	44.4	20.50967	0.749	-102.1	70.1	38.2	43.7	27.1	46.41375	19-20
21	-14.107	-19.893	423.78901	-38.6	10.3	-86.3	46.8	19.68828	0.794	-101.0	68.6	43.3	39.1	20.6	46.10143	20-21
22	-14.039	-21.324	407.13067	-30.3	8.0	-85.7	49.2	18.98378	0.831	-100.1	67.2	48.6	35.2	14.1	42.08488	21-22
23	-13.986	-22.648	396.10743	-20.4	5.8	-85.2	51.6	18.37000	0.866	-99.3	66.0	53.8	32.1	7.7	38.95602	22-23
24	-13.944	-23.888	389.95708	-9.1	3.6	-84.7	54.0	17.82864	0.895	-98.6	64.8	59.0	30.3	1.4	36.46722	23-24
25	-12.645	-23.959	372.26479	-11.5	3.3	-83.4	51.6	17.27070	0.936	-94.4	64.5	58.5	23.8	3.5	39.39582	24-25
26	-11.437	-24.023	359.69043	-15.7	3.1	-82.2	49.1	16.77966	0.972	-90.1	64.3	58.4	17.3	4.7	36.62935	25-26
27	-10.303	-24.080	351.65984	-24.2	2.9	-81.1	45.1	16.29389	0.997	-85.8	64.1	58.5	11.2	5.2	34.38854	26-27
28	-9.366	-24.126	347.97427	-43.5	2.7	-80.1	44.3	15.57931	0.974	-82.2	64.0	58.9	6.5	5.0	28.40956	27-28

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JULY 31, 1964 13 HR 23 MIN 22 SEC 944 MS TAB NO 171 ATLAS PHOTO NO 171 POD SEQUENCE NO 348

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				145.855		334.64804	-8.680	-24.805	2070.103	2.434	-66.925	115.498				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.719	-20.398	370.36213	-35.1	6.1	-83.5	46.8	17.35599	0.899	-93.6	67.8	42.0	27.9	25.2	0.	0-1
2	-11.359	-21.619	361.38577	-45.8	6.6	-82.5	44.2	17.17461	0.911	-90.1	66.6	47.6	24.3	17.9	41.17329	1-2
3	-10.262	-22.888	344.43746	-46.5	4.5	-81.1	44.1	16.22176	0.975	-85.5	65.3	53.2	15.0	11.7	50.28827	2-3
4	-10.203	-21.752	352.76922	-58.7	6.0	-81.0	41.7	16.68666	0.943	-85.1	66.4	47.8	20.2	18.3	33.91020	3-4
5	-10.140	-20.538	365.64299	-65.9	7.5	-81.0	39.4	17.20554	0.906	-84.7	67.6	42.5	26.1	24.9	36.23186	4-5
6	-11.332	-20.359	375.02021	-54.5	8.3	-82.4	41.9	17.73886	0.874	-90.1	67.9	42.2	29.5	24.7	36.50145	5-6
7	-12.610	-20.152	389.52301	-45.5	9.2	-84.4	44.3	18.34513	0.837	-95.6	68.2	42.5	33.9	23.2	39.19237	6-7
8	-12.595	-21.468	374.84012	-36.8	7.2	-84.1	46.6	17.72841	0.875	-95.1	66.9	47.9	29.4	16.5	38.90575	7-8
9	-12.586	-22.692	365.22368	-25.4	5.3	-83.6	46.9	17.18981	0.908	-94.7	65.7	53.2	25.9	10.0	36.19185	8-9
10	-11.387	-22.796	352.53527	-33.4	4.8	-82.4	46.5	16.67540	0.943	-90.1	65.5	53.0	20.1	11.3	36.46189	9-10
11	-10.262	-22.888	344.43746	-46.5	4.5	-81.1	44.1	16.22176	0.975	-85.5	65.3	53.2	15.0	11.7	34.16921	10-11
12	-9.412	-24.005	336.53620	-43.8	2.8	-80.1	44.2	15.07095	0.974	-82.2	64.1	58.9	6.6	5.1	42.13261	11-12
13	-9.334	-22.960	340.71717	-65.5	4.2	-80.0	41.9	15.86535	0.999	-81.5	65.1	53.7	11.8	11.4	31.31644	12-13
14	-9.251	-21.855	348.75925	-73.8	5.6	-79.8	39.6	16.30112	0.967	-80.8	66.2	48.4	17.9	17.8	33.13497	13-14
15	-9.160	-20.677	361.15442	-77.9	7.0	-79.6	37.3	16.78995	0.930	-80.0	67.4	43.1	24.2	24.2	35.33945	14-15
16	-9.060	-19.408	378.46093	-80.4	8.3	-79.3	35.0	17.34425	0.889	-78.9	68.6	38.0	30.6	30.6	38.04934	15-16
17	-10.072	-19.229	383.66324	-70.5	9.0	-80.8	37.1	17.79842	0.865	-84.1	68.9	37.2	32.2	31.5	31.12328	16-17
18	-11.306	-18.994	394.11306	-60.5	10.0	-82.8	39.6	18.38456	0.832	-90.1	69.2	36.8	35.2	31.4	38.02342	17-18
19	-12.634	-18.720	410.04329	-52.2	11.1	-84.8	42.0	19.05572	0.794	-96.2	69.6	37.2	39.0	29.9	41.01550	18-19
20	-14.080	-18.396	432.35780	-45.4	12.4	-87.1	44.4	19.83607	0.750	-102.1	70.1	38.2	43.6	27.0	44.84537	19-20
21	-13.996	-19.910	409.91685	-38.7	10.2	-86.4	46.7	19.04376	0.795	-101.0	68.6	43.3	39.0	20.6	44.56576	20-21
22	-13.930	-21.293	393.80063	-30.5	8.0	-85.8	49.0	18.36214	0.833	-100.1	67.3	48.6	35.1	14.2	40.70837	21-22
23	-13.878	-22.574	383.10062	-20.6	5.8	-85.3	51.3	17.76670	0.867	-99.3	66.0	53.8	32.1	7.8	37.68949	22-23
24	-13.837	-23.773	377.08749	-9.4	3.6	-84.3	53.7	17.24015	0.895	-98.6	64.9	59.0	30.2	1.6	35.27772	23-24
25	-12.582	-23.842	360.03244	-11.8	3.3	-83.5	51.3	16.70317	0.936	-94.4	64.6	58.5	23.7	3.6	38.07383	24-25
26	-11.414	-23.904	347.89172	-16.1	3.1	-82.3	48.9	16.22926	0.971	-90.1	64.4	58.4	17.4	4.8	35.41970	25-26
27	-10.318	-23.960	340.12047	-24.7	2.9	-81.1	45.0	15.76316	0.997	-85.8	64.2	58.5	11.3	5.3	33.26119	26-27
28	-9.412	-24.005	336.53620	-43.8	2.8	-80.1	44.2	15.07095	0.974	-82.2	64.1	58.9	6.6	5.1	27.47912	27-28

JULY 31, 1964 13 HR 23 MIN 28 SEC 64 MS TAB NO 172 ATLAS PHOTO NO 172 POD SEQUENCE NO 350

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				140.736		323.17313	-8.739	-24.680	2058.628	2.440	-66.842	115.478				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.713	-20.409	357.70761	-35.3	6.2	-83.6	46.6	16.77013	0.899	-93.6	67.8	42.1	27.8	25.1	0.	0-1
2	-11.338	-21.578	349.20524	-45.9	6.6	-82.5	44.1	16.59574	0.911	-90.1	66.7	47.6	24.4	18.0	39.55591	1-2
3	-10.278	-22.804	332.78418	-46.6	4.5	-81.1	44.0	15.67294	0.974	-85.5	65.4	53.2	15.1	11.8	48.60519	2-3
4	-10.221	-21.706	340.87355	-58.7	6.0	-81.0	41.7	16.12202	0.942	-85.1	66.4	47.8	20.3	18.3	32.77440	3-4
5	-10.160	-20.533	353.33100	-65.9	7.5	-80.9	39.5	16.62616	0.906	-84.6	67.6	42.5	26.1	24.9	35.01714	4-5
6	-11.312	-20.359	362.39659	-54.5	8.3	-82.6	41.8	17.14176	0.874	-90.1	67.9	42.2	29.5	24.7	35.27361	5-6
7	-12.547	-20.160	376.38237	-45.6	9.1	-84.5	44.2	17.72625	0.838	-95.6	68.2	42.5	33.9	23.2	37.86108	6-7
8	-12.532	-21.431	362.18308	-37.0	7.2	-84.1	46.4	17.12977	0.875	-95.1	67.0	47.9	29.4	16.6	37.60097	7-8
9	-12.523	-22.614	352.85211	-25.8	5.3	-83.8	48.7	16.60364	0.908	-94.7	65.8	53.2	25.9	10.1	34.97838	8-9
10	-11.365	-22.715	340.61347	-33.6	4.9	-82.6	46.3	16.11149	0.943	-90.1	65.6	53.0	20.1	11.4	35.22064	9-10
11	-10.278	-22.804	332.78418	-46.6	4.5	-81.1	44.0	15.67294	0.974	-85.5	65.4	53.2	15.1	11.8	33.01473	10-11
12	-9.457	-23.884	325.07603	-44.2	2.8	-80.1	44.1	14.56143	0.974	-82.1	64.2	58.9	6.8	5.3	40.71660	11-12
13	-9.382	-22.874	329.16871	-65.4	4.2	-80.0	41.9	15.32756	0.998	-81.5	65.2	53.7	11.9	11.5	30.25969	12-13
14	-9.301	-21.806	336.97606	-73.6	5.6	-79.8	39.6	15.75030	0.966	-80.8	66.3	48.4	18.0	17.8	32.02274	13-14
15	-9.213	-20.667	348.96986	-77.8	7.0	-79.5	37.4	16.22340	0.930	-80.0	67.4	43.1	24.2	24.2	34.15229	14-15
16	-9.116	-19.442	365.68213	-80.3	8.3	-79.2	35.2	16.75854	0.890	-78.9	68.6	38.0	30.6	30.6	36.76049	15-16
17	-10.094	-19.268	370.73245	-70.5	9.0	-80.8	37.2	17.19854	0.865	-84.1	68.8	37.2	32.2	31.5	30.07721	16-17
18	-11.287	-19.041	380.82957	-60.5	10.0	-82.8	39.6	17.76495	0.833	-90.1	69.2	36.8	35.1	31.3	36.74172	17-18
19	-12.569	-18.777	396.18265	-52.2	11.0	-84.8	41.9	18.41162	0.795	-96.2	69.5	37.2	39.0	29.8	39.61566	18-19
20	-13.965	-18.466	417.64471	-45.4	12.3	-87.1	44.3	19.16105	0.752	-102.1	70.0	38.2	43.5	27.0	43.27683	19-20
21	-13.885	-19.927	396.01253	-38.8	10.2	-86.4	46.5	18.39775	0.796	-101.0	68.6	43.3	38.9	20.6	43.02826	20-21
22	-13.821	-21.263	380.44020	-30.6	8.0	-85.8	48.8	17.73910	0.834	-100.1	67.3	48.6	35.0	14.2	39.32846	21-22
23	-13.771	-22.500	370.06667	-20.8	5.8	-85.3	51.0	17.16215	0.867	-99.3	66.1	53.8	32.0	7.9	36.41946	22-23
24	-13.731	-23.657	364.19617	-9.6	3.6	-84.9	53.3	16.65068	0.896	-98.6	65.0	59.0	30.1	1.7	34.08529	23-24
25	-12.519	-23.725	347.77584	-12.2	3.4	-83.6	51.0	16.13452	0.936	-94.4	64.7	58.5	23.7	3.7	36.75124	24-25
26	-11.391	-23.786	336.06836	-16.5	3.1	-82.3	48.6	15.67771	0.971	-90.1	64.5	58.4	17.4	5.0	34.20793	25-26
27	-10.332	-23.841	328.55739	-25.2	2.9	-81.1	44.8	15.23112	0.998	-85.8	64.4	58.5	11.3	5.4	32.13151	26-27
28	-9.457	-23.884	325.07603	-44.2	2.8	-80.1	44.1	14.56143	0.974	-82.1	64.2	58.9	6.8	5.3	26.54658	27-28

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JULY 31, 1964 13 HR 23 MIN 33 SEC 184 MS

TAB NO 173

ATLAS PHOTO NO 173

POD SEQUENCE NO 352

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				135.616		311.68002	-8.798	-24.555	2047.135	2.445	-66.758	115.457				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.708	-20.421	345.03008	-35.4	6.2	-83.6	46.4	16.18251	0.899	-93.6	67.8	42.1	27.7	25.1	0.	0-
2	-11.317	-21.536	336.98808	-46.0	6.6	-82.6	44.0	16.01513	0.911	-90.1	66.7	47.6	24.4	18.0	37.95251	1-2
3	-10.294	-22.721	321.10097	-46.8	4.5	-81.1	43.9	15.12270	0.974	-85.5	65.5	53.2	15.1	11.9	46.91572	2-3
4	-10.239	-21.661	328.94391	-58.7	6.0	-81.0	41.7	15.55777	0.942	-85.1	66.5	47.8	20.3	18.4	31.63474	3-4
5	-10.180	-20.528	340.98187	-65.8	7.6	-80.9	39.5	16.04504	0.906	-84.6	67.6	42.5	26.1	24.9	33.79818	4-5
6	-11.291	-20.361	349.73298	-54.5	8.3	-82.7	41.8	16.54276	0.874	-90.1	67.9	42.2	29.5	24.7	34.04137	5-6
7	-12.483	-20.168	363.20040	-45.7	9.1	-84.5	44.1	17.10543	0.838	-95.6	68.2	42.5	33.8	23.2	36.52587	6-7
8	-12.468	-21.395	349.48799	-37.1	7.2	-84.2	46.3	16.52932	0.875	-95.1	67.0	47.9	29.4	16.7	36.28750	7-8
9	-12.460	-22.537	340.44696	-26.1	5.3	-83.9	48.5	16.01988	0.908	-94.7	65.9	53.2	25.9	10.2	33.76050	8-9
10	-11.342	-22.634	328.65930	-33.8	4.9	-82.5	46.2	15.54604	0.943	-90.1	65.7	53.0	20.1	11.5	33.97622	9-10
11	-10.294	-22.721	321.10097	-46.8	4.5	-81.1	43.9	15.12270	0.974	-85.5	65.5	53.2	15.1	11.9	31.85669	10-11
12	-9.501	-23.763	313.59317	-44.6	2.8	-80.1	44.0	14.05064	0.974	-82.1	64.4	58.9	6.9	5.4	39.29618	11-12
13	-9.429	-22.789	317.59306	-65.3	4.2	-80.0	41.9	14.78851	0.998	-81.5	65.3	53.7	12.0	11.6	29.20016	12-13
14	-9.350	-21.758	325.16192	-73.5	5.6	-79.8	39.7	15.19804	0.966	-80.8	66.3	48.4	18.0	17.9	30.90701	13-14
15	-9.266	-20.658	336.75146	-77.6	7.0	-79.5	37.5	15.65529	0.930	-79.9	67.4	43.1	24.3	24.3	32.96131	14-15
16	-9.172	-19.476	352.86779	-80.1	8.4	-79.2	35.3	16.17120	0.890	-78.9	68.5	38.0	30.6	30.6	35.46799	15-16
17	-10.116	-19.308	357.76261	-70.4	9.0	-80.8	37.3	16.59685	0.865	-84.1	68.8	37.2	32.2	31.4	29.02764	16-17
18	-11.267	-19.088	367.50418	-60.5	9.9	-82.7	39.6	17.14338	0.833	-90.1	69.1	36.8	35.1	31.3	35.45555	17-18
19	-12.504	-18.835	382.27919	-52.2	11.0	-84.8	41.9	17.76552	0.796	-96.2	69.5	37.2	38.9	29.8	38.21191	18-19
20	-13.850	-18.537	402.89106	-45.5	12.3	-87.1	44.2	18.48416	0.753	-102.1	69.9	38.2	43.4	26.9	41.70618	19-20
21	-13.773	-19.945	382.06781	-38.9	10.1	-86.4	46.4	17.74986	0.797	-101.0	68.5	43.3	38.8	20.6	41.48750	20-21
22	-13.712	-21.233	367.04227	-30.8	8.0	-85.9	48.5	17.11431	0.833	-100.1	67.3	48.6	34.9	14.1	37.94409	21-22
23	-13.663	-22.426	356.99988	-21.0	5.8	-85.4	50.7	16.55609	0.868	-99.3	66.1	53.8	31.9	8.0	35.14503	22-23
24	-13.624	-23.543	351.27751	-9.9	3.7	-85.0	52.9	16.05998	0.897	-98.6	65.0	59.0	30.0	1.9	32.88929	23-24
25	-12.456	-23.609	335.49101	-12.5	3.4	-83.6	50.7	15.56457	0.936	-94.4	64.8	58.5	23.7	3.9	35.42688	24-25
26	-11.368	-23.668	324.21768	-16.9	3.2	-82.4	48.4	15.12489	0.971	-90.1	64.7	58.4	17.4	5.1	32.99337	25-26
27	-10.346	-23.721	316.96907	-25.7	3.0	-81.1	44.6	14.69759	0.998	-85.8	64.5	58.5	11.4	5.5	30.99885	26-27
28	-9.501	-23.763	313.59317	-44.6	2.8	-80.1	44.0	14.05064	0.974	-82.1	64.4	58.9	6.9	5.4	25.61190	27-28

TAB NO 174

ATLAS PHOTO NO 174

POD SEQUENCE NO 354

JULY 31, 1964 13 HR 23 MIN 38 SEC 304 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				130.496		300.16817	-8.858	-24.428	2035.623	2.451	-66.673	115.435				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.703	-20.432	332.32876	-35.6	6.2	-83.7	46.3	15.59333	0.899	-93.6	67.7	42.2	27.7	25.0	0.	0-
2	-11.295	-21.496	324.73716	-46.1	6.6	-82.6	43.9	15.43291	0.911	-90.1	66.8	47.6	24.4	18.1	36.36160	1-2
3	-10.309	-22.637	309.38904	-46.9	4.5	-81.1	43.8	14.57111	0.974	-85.5	65.5	53.2	15.2	12.0	45.22067	2-3
4	-10.256	-21.616	316.98196	-58.7	6.1	-81.0	41.6	14.99200	0.942	-82.1	66.5	47.8	20.4	18.4	30.49143	3-4
5	-10.199	-20.524	328.59772	-65.8	7.6	-80.9	39.5	15.46228	0.906	-84.6	67.6	42.5	26.1	24.9	32.57530	4-5
6	-11.270	-20.363	337.03291	-54.5	8.3	-82.7	41.8	15.94204	0.874	-90.1	67.9	42.2	29.5	24.7	32.80569	5-6
7	-12.418	-20.178	349.98216	-45.7	9.1	-84.5	44.0	16.48290	0.839	-95.6	68.2	42.5	33.8	23.2	35.18736	6-7
8	-12.404	-21.360	336.75916	-37.2	7.2	-84.2	46.1	15.92728	0.875	-95.1	67.0	47.9	29.4	16.7	34.97005	7-8
9	-12.396	-22.459	328.01193	-26.3	5.3	-83.9	48.2	15.43473	0.908	-94.7	65.9	53.2	25.9	10.3	32.53875	8-9
10	-11.319	-22.553	316.67515	-34.0	4.9	-82.5	46.0	14.97918	0.943	-90.1	65.7	53.0	20.2	11.6	32.72904	9-10
11	-10.309	-22.637	309.38904	-46.9	4.5	-81.1	43.8	14.57111	0.974	-85.5	65.5	53.2	15.2	12.0	30.69576	10-11
12	-9.546	-23.643	302.08766	-45.0	2.8	-80.1	43.9	13.53864	0.975	-82.1	64.5	58.9	7.0	5.5	37.87167	11-12
13	-9.476	-22.703	305.99063	-65.2	4.3	-79.9	41.8	14.24822	0.998	-81.5	65.4	53.7	12.1	11.7	28.13792	12-13
14	-9.400	-21.709	313.31757	-73.3	5.7	-79.7	39.7	14.64438	0.966	-80.8	66.4	48.4	18.1	17.9	29.78792	13-14
15	-9.318	-20.650	324.50031	-77.5	7.0	-79.5	37.6	15.08567	0.930	-79.9	67.4	43.1	24.3	24.3	31.76667	14-15
16	-9.228	-19.510	340.01955	-80.0	8.4	-79.2	35.5	15.58233	0.890	-78.9	68.5	38.0	30.6	30.5	34.17232	15-16
17	-10.138	-19.348	344.75652	-70.3	9.1	-80.8	37.4	15.99348	0.866	-84.1	68.7	37.2	32.2	31.4	27.97507	16-17
18	-11.247	-19.137	354.14127	-60.5	9.9	-82.7	39.7	16.52006	0.834	-90.1	69.1	36.8	35.0	31.2	34.16567	17-18
19	-12.438	-18.893	368.33909	-52.3	10.9	-84.8	41.9	17.11773	0.797	-96.2	69.4	37.2	38.8	29.7	36.80527	18-19
20	-13.734	-18.608	388.10534	-45.5	12.2	-87.0	44.1	17.80580	0.755	-102.1	69.8	38.2	43.2	26.8	40.13515	19-20
21	-13.660	-19.963	368.08985	-39.0	10.0	-86.4	46.2	17.10044	0.798	-101.0	68.5	43.3	38.7	20.6	39.94481	20-21
22	-13.601	-21.204	353.61295	-30.9	7.9	-85.9	48.3	16.48807	0.835	-100.1	67.3	48.6	34.9	14.3	36.55623	21-22
23	-13.554	-22.353	343.90546	-21.3	5.8	-85.5	50.4	15.94876	0.868	-99.3	66.2	53.8	31.9	8.1	33.86695	22-23
24	-13.516	-23.428	338.33624	-10.2	3.7	-85.1	52.6	15.46825	0.897	-98.6	65.1	59.0	30.0	2.0	31.69024	23-24
25	-12.392	-23.492	323.18116	-12.8	3.4	-83.7	50.4	14.99346	0.936	-94.4	64.9	58.5	23.7	4.0	34.10171	24-25
26	-11.344	-23.549	312.34165	-17.3	3.2	-82.4	48.1	14.57089	0.971	-90.1	64.8	58.4	17.4	5.2	31.77677	25-26
27	-10.359	-23.601	305.35640	-26.2	3.0	-81.2	44.4	14.16270	0.998	-85.8	64.6	58.5	11.5	5.7	29.86376	26-27
28	-9.546	-23.643	302.08766	-45.0	2.8	-80.1	43.9	13.53864	0.975	-82.1	64.5	58.9	7.0	5.5	24.67501	27-28

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JULY 31, 1964 13 HR 23 MIN 43 SEC 424 MS

TAB NO 175

ATLAS PHOTO NO 175

POD SEQUENCE NO 356

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LONG	R	V	PTH	AZ				
				125.376		288.63753	-8.918	-24.299	2024.093	2.456	-66.588	115.414				
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.698	-20.442	319.60369	-35.8	6.2	-83.7	46.1	15.00261	0.899	-93.6	67.7	42.2	27.6	25.0	0.	0-1
2	-11.272	-21.455	312.45298	-46.2	6.6	-82.6	43.8	14.84911	0.911	-90.1	66.8	47.6	24.4	18.1	34.78285	1-2
3	-10.324	-22.554	297.64858	-47.1	4.6	-81.1	43.7	14.01817	0.973	-85.5	65.6	53.2	15.3	12.0	43.52009	2-3
4	-10.273	-21.571	304.98793	-58.7	6.1	-81.0	41.6	14.42471	0.942	-85.1	66.6	47.8	20.4	18.5	29.34452	3-4
5	-10.218	-20.521	316.17897	-65.7	7.6	-80.9	39.6	14.87789	0.906	-84.6	67.6	42.4	26.1	24.9	31.34859	4-5
6	-11.249	-20.365	324.29700	-54.6	8.3	-82.7	41.7	15.33962	0.875	-90.1	67.9	42.2	29.5	24.7	31.56620	5-6
7	-12.353	-20.187	336.72865	-45.8	9.0	-84.5	43.9	15.85870	0.839	-95.6	68.1	42.5	33.8	23.2	33.84610	6-7
8	-12.340	-21.324	323.99739	-37.4	7.2	-84.2	45.9	15.32369	0.875	-95.1	67.0	47.9	29.4	16.8	33.64871	7-8
9	-12.332	-22.363	315.54763	-26.5	5.3	-84.0	48.0	14.84819	0.908	-94.7	66.0	53.2	25.9	10.4	31.31322	8-9
10	-11.296	-22.473	304.66143	-34.3	4.9	-82.5	45.8	14.41092	0.943	-90.1	65.8	53.0	20.2	11.6	31.47930	9-10
11	-10.324	-22.554	297.64858	-47.1	4.6	-81.1	43.7	14.01817	0.973	-85.5	65.6	53.2	15.3	12.0	29.53186	10-11
12	-9.590	-23.522	290.55948	-45.3	2.9	-80.1	43.8	13.02542	0.975	-82.1	64.6	58.9	7.1	5.6	36.44313	11-12
13	-9.522	-22.618	294.36140	-65.2	4.3	-79.9	41.8	13.70668	0.997	-81.5	65.5	53.7	12.2	11.8	27.07297	12-13
14	-9.450	-21.661	301.44310	-73.2	5.7	-79.7	39.7	14.08931	0.965	-80.8	66.4	48.4	18.1	18.0	28.66546	13-14
15	-9.371	-20.642	312.21663	-77.4	7.1	-79.5	37.7	14.51454	0.930	-79.9	67.4	43.1	24.3	24.3	30.56849	14-15
16	-9.284	-19.545	327.13773	-79.9	8.4	-79.1	35.6	14.99192	0.890	-78.9	68.5	38.0	30.5	30.5	32.87343	15-16
17	-10.159	-19.389	331.71474	-70.3	9.1	-80.8	37.5	15.38846	0.866	-84.1	68.7	37.2	32.1	31.4	26.91922	16-17
18	-11.226	-19.186	340.74168	-60.5	9.9	-82.7	39.7	15.89503	0.834	-90.1	69.0	36.8	35.0	31.2	32.87235	17-18
19	-12.372	-18.952	354.36361	-52.3	10.9	-84.8	41.8	16.46828	0.798	-96.2	69.3	37.2	38.7	29.7	35.39610	18-19
20	-13.617	-18.680	373.28937	-45.6	12.1	-87.0	44.0	17.12606	0.756	-102.1	69.7	38.2	43.1	26.8	38.56419	19-20
21	-13.547	-19.982	354.08014	-39.1	10.0	-86.5	46.0	16.44954	0.799	-101.0	68.5	43.3	38.7	20.6	38.40045	20-21
22	-13.490	-21.175	340.15343	-31.1	7.9	-86.0	48.1	15.86042	0.836	-100.1	67.3	48.6	34.8	14.4	35.16510	21-22
23	-13.445	-22.280	330.78433	-21.5	5.8	-85.5	50.1	15.34019	0.869	-99.3	66.2	53.8	31.8	8.2	32.58537	22-23
24	-13.408	-23.314	325.37318	-10.4	3.7	-85.2	52.2	14.87553	0.898	-98.6	65.2	59.0	29.9	2.1	30.48827	23-24
25	-12.327	-23.376	310.84686	-13.1	3.4	-83.8	50.0	14.42121	0.937	-94.4	65.0	58.5	23.6	4.1	32.77566	24-25
26	-11.320	-23.431	300.44058	-17.7	3.2	-82.5	47.9	14.01571	0.971	-90.1	64.9	58.4	17.4	5.3	30.55816	25-26
27	-10.373	-23.482	293.71951	-26.7	3.0	-81.2	44.3	13.62647	0.998	-85.8	64.7	58.5	11.5	5.8	28.72633	26-27
28	-9.590	-23.522	290.55948	-45.3	2.9	-80.1	43.8	13.02542	0.975	-82.1	64.6	58.9	7.1	5.6	23.73611	27-28

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TAB NO 176

ATLAS PHOTO NO 176

POD SEQUENCE NO 358

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LONG	R	V	PTH	AZ				
				120.256		277.08810	-8.979	-24.169	2012.543	2.462	-66.501	115.392				
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.693	-20.453	300.85482	-35.9	6.2	-83.7	45.9	14.41031	0.899	-93.6	67.7	42.3	27.5	24.9	0.	0-1
2	-11.250	-21.415	300.13375	-46.3	6.6	-82.6	43.7	14.26365	0.910	-90.1	66.8	47.6	24.4	18.2	33.22761	1-2
3	-10.340	-22.471	285.87834	-47.2	4.6	-81.1	43.6	13.46384	0.973	-85.5	65.7	53.2	15.4	12.1	41.81372	2-3
4	-10.290	-21.527	292.95923	-58.7	6.1	-81.0	41.6	13.85579	0.941	-85.1	66.6	47.8	20.5	18.5	28.19348	3-4
5	-10.237	-20.518	303.72139	-65.7	7.6	-80.9	39.6	14.29168	0.906	-84.6	67.6	42.4	26.2	24.9	30.11718	4-5
6	-11.228	-20.368	311.52183	-54.6	8.3	-82.7	41.7	14.73535	0.875	-90.1	67.9	42.2	29.5	24.7	30.32312	5-6
7	-12.288	-20.198	323.43729	-45.9	9.0	-84.5	43.8	15.23273	0.839	-95.6	68.1	42.5	33.7	23.2	32.50186	6-7
8	-12.275	-21.290	311.20177	-37.5	7.2	-84.3	45.8	14.71850	0.876	-95.1	67.1	47.9	29.3	16.8	33.32277	7-8
9	-12.267	-22.306	303.05469	-26.7	5.3	-84.1	47.8	14.26032	0.908	-94.7	66.1	53.2	25.8	10.5	30.08350	8-9
10	-11.273	-22.393	292.61773	-34.5	4.9	-82.6	45.7	13.84124	0.942	-90.1	65.9	53.0	20.2	11.7	30.22749	9-10
11	-10.340	-22.471	285.87834	-47.2	4.6	-81.1	43.6	13.46384	0.973	-85.5	65.7	53.2	15.4	12.1	28.30515	10-11
12	-9.635	-23.402	279.00796	-45.6	2.9	-80.1	43.7	12.51092	0.975	-82.1	64.7	58.9	7.2	5.8	35.01030	11-12
13	-9.569	-22.533	282.70353	-65.1	4.3	-79.9	41.7	13.16381	0.997	-81.5	65.6	53.7	12.3	11.8	26.00497	12-13
14	-9.499	-21.614	289.53523	-73.0	5.7	-79.7	39.8	13.53268	0.965	-80.8	66.5	48.4	18.2	18.0	27.53908	13-14
15	-9.423	-20.634	299.89552	-77.2	7.1	-79.4	37.8	13.94168	0.930	-79.9	67.4	43.1	24.3	24.3	29.36580	14-15
16	-9.340	-19.581	314.21556	-79.8	8.4	-79.1	35.8	14.39967	0.891	-78.9	68.5	38.0	30.5	30.5	31.57007	15-16
17	-10.181	-19.431	318.63111	-70.2	9.1	-80.7	37.6	14.78150	0.866	-84.1	68.7	37.2	32.1	31.3	25.85990	16-17
18	-11.205	-19.236	327.29999	-60.5	9.9	-82.7	39.7	15.26803	0.835	-90.1	69.0	36.8	34.9	31.1	31.57513	17-18
19	-12.306	-19.012	340.34811	-52.3	10.9	-84.8	41.8	15.81697	0.799	-96.2	69.3	37.2	38.6	29.6	33.98410	18-19
20	-13.501	-18.752	358.43940	-45.6	12.0	-87.0	43.9	16.44476	0.758	-102.1	69.7	38.2	43.0	26.7	36.99352	19-20
21	-13.434	-20.002	340.03698	-39.2	9.9	-86.5	45.9	15.79710	0.800	-101.0	68.4	43.3	38.6	20.6	36.85320	20-21
22	-13.380	-21.146	326.66388	-31.2	7.9	-86.0	47.9	15.23139	0.837	-100.0	67.3	48.6	34.7	14.4	33.76994	21-22
23	-13.335	-22.208	317.63817	-21.7	5.8	-85.6	49.9	14.73047	0.870	-99.3	66.3	53.8	31.7	8.3	31.29992	22-23
24	-13.299	-23.200	312.39143	-10.7	3.7	-85.3	51.8	14.28196	0.899	-98.6	65.3	59.0	29.8	2.3	29.28329	23-24
25	-12.263	-23.260	298.48997	-13.4	3.5	-83.8	49.7	13.84792	0.937	-94.4	65.2	58.5	23.6	4.3	31.44978	24-25
26	-11.296	-23.314	288.51533	-18.1	3.2	-82.5	47.7	13.45941	0.971	-90.1	65.0	58.4	17.5	5.5	29.33816	25-26
27	-10.386	-23.362	282.05841	-27.1	3.0	-81.2	44.1	13.08891	0.999	-85.8	64.8	58.5	11.6	5.9	27.58640	26-27
28	-9.635	-23.402	279.00796	-45.6	2.9	-80.1	43.7	12.51092	0.975	-82.1	64.7	58.9	7.2	5.8	22.79533	27-28

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TAB NO 177

ATLAS PHOTO NO 177

POD SEQUENCE NO 360

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				115.136		265.51961	-9.041	-24.037	2000.975	2.468	-66.414	115.369				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.688	-20.463	294.08172	-36.1	6.2	-83.8	45.8	13.81644	0.899	-93.6	67.7	42.3	27.5	24.9	0.	0-1
2	-11.228	-21.376	287.78036	-46.4	6.6	-82.6	43.6	13.67657	0.910	-90.1	66.9	47.6	24.5	18.2	31.68464	1-2
3	-10.355	-22.389	274.07873	-47.3	4.6	-81.1	43.5	12.90812	0.973	-85.5	65.8	53.2	15.4	12.2	40.10172	2-3
4	-10.307	-21.483	280.89760	-58.7	6.1	-81.0	41.6	13.28531	0.941	-85.1	66.7	47.8	20.5	18.5	27.03874	3-4
5	-10.256	-20.515	291.22832	-65.6	7.6	-80.9	39.7	13.70380	0.906	-84.6	67.6	42.4	26.2	24.9	28.88185	4-5
6	-11.206	-20.371	298.70998	-54.6	8.3	-82.7	41.7	14.12934	0.875	-90.1	67.8	42.2	29.4	24.7	29.07655	5-6
7	-12.222	-20.208	310.10984	-46.0	9.0	-84.5	43.7	14.60505	0.840	-95.6	68.1	42.5	33.7	23.2	31.15461	6-7
8	-12.210	-21.255	298.37238	-37.6	7.2	-84.3	45.6	14.11171	0.876	-95.1	67.1	47.9	29.3	16.9	30.99290	7-8
9	-12.202	-22.230	290.53163	-26.9	5.3	-84.1	47.5	13.67102	0.908	-94.7	66.1	53.2	25.8	10.6	28.84992	8-9
10	-11.249	-22.314	280.54357	-34.7	4.9	-82.6	45.5	13.27012	0.942	-90.1	66.0	53.0	20.3	11.8	28.97312	9-10
11	-10.355	-22.389	274.07873	-47.3	4.6	-81.1	43.5	12.90812	0.973	-85.5	65.8	53.2	15.4	12.2	27.19536	10-11
12	-9.679	-23.281	267.43295	-45.9	2.9	-80.1	43.6	11.99515	0.976	-82.1	64.9	58.9	7.4	5.9	33.57323	11-12
13	-9.616	-22.449	271.01803	-65.0	4.4	-79.9	41.7	12.61966	0.996	-81.5	65.7	53.7	12.4	11.9	24.93416	12-13
14	-9.549	-21.567	277.59640	-72.9	5.7	-79.7	39.8	12.97462	0.965	-80.8	66.5	48.4	18.3	18.1	26.40925	13-14
15	-9.476	-20.627	287.54105	-77.1	7.1	-79.4	37.9	13.36728	0.930	-79.9	67.4	43.1	24.3	24.3	28.15947	14-15
16	-9.396	-19.618	301.25905	-79.6	8.5	-79.1	36.0	13.80585	0.891	-78.9	68.4	38.0	30.5	30.5	30.26350	15-16
17	-10.202	-19.473	305.51098	-70.1	9.1	-80.7	37.7	14.17285	0.867	-84.1	68.6	37.2	32.1	31.3	24.79751	16-17
18	-11.185	-19.286	313.82085	-60.5	9.9	-82.7	39.8	14.63928	0.835	-90.1	68.9	36.8	34.9	31.1	30.27416	17-18
19	-12.239	-19.073	326.29649	-52.4	10.8	-84.8	41.8	15.16398	0.800	-96.2	69.2	37.2	38.6	29.6	32.56995	18-19
20	-13.384	-18.825	343.55840	-45.7	11.9	-87.0	43.8	15.76203	0.759	-102.1	69.6	38.2	42.9	26.6	35.42262	19-20
21	-13.370	-20.022	325.96127	-39.3	9.9	-86.5	45.7	15.14315	0.801	-101.0	68.4	43.3	38.5	20.6	35.30422	20-21
22	-13.268	-21.118	313.14331	-31.3	7.8	-86.1	47.4	14.06073	0.833	-100.0	67.3	48.4	34.7	14.5	32.37145	21-22
23	-13.226	-22.135	304.46447	-21.9	5.8	-85.7	49.6	14.11948	0.870	-99.3	66.4	53.8	31.7	8.4	30.01089	22-23
24	-13.191	-23.087	299.38706	-10.9	3.7	-85.3	51.5	13.68737	0.899	-98.6	65.4	59.0	29.7	2.4	28.07528	23-24
25	-12.198	-23.144	286.10776	-13.8	3.5	-83.9	49.4	13.27346	0.937	-94.4	65.3	58.5	23.6	4.4	30.12321	24-25
26	-11.271	-23.196	276.56421	-18.4	3.3	-82.5	47.4	12.90190	0.971	-90.1	65.1	58.4	17.5	5.6	28.11594	25-26
27	-10.399	-23.243	270.37225	-27.6	3.1	-81.2	43.6	12.54995	0.999	-85.8	65.0	58.5	11.7	6.0	26.44414	26-27
28	-9.679	-23.281	267.43295	-45.9	2.9	-80.1	43.9	11.99515	0.976	-82.1	64.9	58.9	7.4	5.9	21.85223	27-28

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TAB NO 178

ATLAS PHOTO NO 178

POD SEQUENCE NO 362

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				110.016		253.93182	-9.103	-23.904	1989.387	2.473	-66.325	115.347				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.684	-20.473	281.28413	-36.2	6.2	-83.8	45.6	13.22096	0.899	-93.6	67.7	42.4	27.4	24.8	0.	0-1
2	-11.205	-21.337	275.39251	-46.5	6.6	-82.6	43.5	13.08784	0.910	-90.1	66.9	47.6	24.5	18.2	30.15327	1-2
3	-10.369	-22.307	262.24932	-47.5	4.6	-81.1	43.4	12.35099	0.972	-85.5	65.9	53.2	15.5	12.3	38.38406	2-3
4	-10.324	-21.439	268.80276	-58.7	6.1	-81.0	41.5	12.71326	0.941	-85.1	66.7	47.8	20.6	18.6	25.88033	3-4
5	-10.275	-20.513	278.69965	-65.6	7.6	-80.9	39.7	13.11424	0.906	-84.6	67.6	42.4	26.2	24.9	27.64263	4-5
6	-11.184	-20.375	285.86125	-54.7	8.2	-82.7	41.7	13.52159	0.875	-90.1	67.8	42.2	29.4	24.7	27.82605	5-6
7	-12.156	-20.220	296.74609	-46.0	9.0	-84.6	43.6	13.97566	0.840	-95.6	68.1	42.5	33.6	23.2	29.80443	6-7
8	-12.145	-21.221	285.50873	-37.8	7.2	-84.3	45.5	13.50330	0.876	-95.1	67.1	47.9	29.3	16.9	29.65916	7-8
9	-12.137	-22.154	277.97795	-27.1	5.3	-84.2	47.3	13.08029	0.908	-94.7	66.2	53.2	25.8	10.6	27.61246	8-9
10	-11.226	-22.234	268.43849	-34.9	5.0	-82.6	45.3	12.69754	0.942	-90.1	66.0	53.0	20.3	11.9	27.71611	9-10
11	-10.369	-22.307	262.24932	-47.5	4.6	-81.1	43.4	12.35099	0.972	-85.5	65.9	53.2	15.5	12.3	26.02238	10-11
12	-9.723	-23.161	255.83403	-46.2	3.0	-80.1	43.5	11.47808	0.976	-82.1	65.0	58.9	7.5	6.0	32.13201	11-12
13	-9.663	-22.364	259.30456	-64.9	4.4	-79.9	41.7	12.07421	0.996	-81.5	65.8	53.7	12.5	12.0	23.86048	12-13
14	-9.598	-21.520	265.62634	-72.8	5.8	-79.6	39.8	12.41510	0.964	-80.8	66.6	48.4	18.3	18.1	25.27598	13-14
15	-9.528	-20.621	275.15310	-76.9	7.2	-79.4	38.0	12.79133	0.930	-79.9	67.4	43.1	24.3	24.3	26.94952	14-15
16	-9.452	-19.655	288.26826	-60.5	8.5	-79.0	36.1	13.21047	0.891	-78.9	68.4	38.0	30.4	30.4	28.95381	15-16
17	-10.223	-19.516	292.35440	-70.1	9.1	-80.7	37.9	13.56251	0.867	-84.1	68.6	37.2	32.0	31.2	23.73183	16-17
18	-11.163	-19.337	300.30426	-60.5	9.9	-82.7	39.8	14.00878	0.836	-90.1	68.9	36.8	34.8	31.0	28.96982	17-18
19	-12.172	-19.134	312.20871	-52.4	10.8	-84.8	41.8	14.50931	0.800	-96.2	69.2	37.2	38.5	29.5	31.15229	18-19
20	-13.266	-18.899	328.64635	-45.8	11.8	-87.0	43.7	15.07788	0.761	-102.1	69.5	38.2	42.7	26.6	33.85167	19-20
21	-13.206	-20.042	311.85269	-39.3	9.8	-86.5	45.6	14.48767	0.802	-101.0	68.4	43.3	38.4	20.6	33.75365	20-21
22	-13.156	-21.091	299.59121	-31.5	7.8	-86.1	47.4	13.96897	0.838	-100.0	67.4	48.6	34.6	14.5	30.96968	21-22
23	-13.116	-22.063	291.26268	-22.1	5.8	-85.8	49.3	13.50719	0.871	-99.3	66.4	53.8	31.6	8.5	28.71825	22-23
24	-13.082	-22.973	286.35939	-11.2	3.8	-85.4	51.1	13.09172	0.900	-98.6	65.5	59.0	29.6	2.6	26.86417	23-24
25	-12.133	-23.029	273.69960	-14.1	3.5	-84.0	49.1	12.69779	0.937	-94.4	65.4	58.5	23.5	4.5	28.79594	24-25
26	-11.246	-23.079	264.58665	-18.8	3.3	-82.6	47.2	12.34315	0.971	-90.1	65.2	58.4	17.5	5.7	26.89159	25-26
27	-10.412	-23.124	258.66054	-28.0	3.1	-81.2	43.8	12.00956	0.999	-85.8	65.1	58.5	11.8	6.2	25.29934	26-27
28	-9.723	-23.161	255.83403	-46.2	3.0	-80.1	43.5	11.47808	0.976	-82.1	65.0	58.9	7.5	6.0	20.90702	27-28

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JULY 31, 1964 13 HR 24 MIN 3 SEC 903 MS TAB NO 179 ATLAS PHOTO NO 179 POD SEQUENCE NO 364

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ		
				104.896			242.32491	-9.166	-23.769	1977.780	2.479	-66.236	115.324		
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.679	-20.482	268.46227	-36.4	6.2	-83.8	45.4	12.62380	0.899	-93.6	67.7	42.4	27.3	24.7	0-1
2	-11.182	-21.298	262.96795	-46.6	6.6	-82.7	43.4	12.49737	0.910	-90.1	66.9	47.6	24.5	18.3	28.64283
3	-10.384	-22.225	250.38878	-47.6	4.7	-81.1	43.3	11.79240	0.972	-85.5	66.0	53.2	15.6	12.4	36.66034
4	-10.341	-21.396	256.67245	-58.7	6.2	-81.0	41.5	12.13953	0.940	-85.1	66.8	47.8	20.6	18.6	24.71779
5	-10.294	-20.512	266.13202	-65.5	7.6	-80.9	39.7	12.52286	0.906	-84.6	67.6	42.5	26.2	24.9	26.39892
6	-11.162	-20.380	272.97232	-54.7	8.2	-82.7	41.6	12.91193	0.875	-90.1	67.8	42.2	29.4	24.6	26.57173
7	-12.090	-20.232	283.34265	-46.1	8.9	-84.6	43.5	13.36441	0.841	-95.6	68.1	42.5	33.6	23.2	28.45097
8	-12.079	-21.188	272.60876	-37.9	7.1	-84.4	45.3	12.89318	0.876	-95.1	67.1	47.9	29.3	16.9	28.32086
9	-12.077	-22.078	255.35251	-27.4	5.5	-84.2	47.1	12.48807	0.909	-94.7	66.3	53.2	25.8	10.7	26.37067
10	-11.202	-22.155	256.30125	-35.1	5.0	-82.6	45.2	12.12343	0.942	-90.1	66.1	53.0	20.3	12.0	26.45637
11	-10.384	-22.225	250.38878	-47.6	4.7	-81.1	43.3	11.79240	0.972	-85.5	66.0	53.2	15.6	12.4	24.84638
12	-9.767	-23.041	244.21056	-46.5	3.0	-80.0	43.4	10.95964	0.976	-82.1	65.1	58.9	7.6	6.1	30.68621
13	-9.709	-22.280	247.56172	-64.8	4.4	-79.8	41.7	11.52739	0.996	-81.5	65.8	53.7	12.6	12.1	22.78372
14	-9.647	-21.474	253.62275	-72.6	5.8	-79.6	39.9	11.85402	0.964	-80.8	66.6	48.4	18.4	18.2	24.13886
15	-9.581	-20.615	262.72832	-76.8	7.2	-79.3	38.1	12.21367	0.930	-79.9	67.5	43.1	24.4	24.3	25.73535
16	-9.508	-19.693	275.23862	-79.4	8.5	-79.0	36.3	12.61332	0.891	-78.9	68.4	38.0	30.4	30.4	27.64013
17	-10.244	-19.560	279.15677	-70.6	9.1	-80.7	38.0	12.95027	0.867	-84.1	68.6	37.2	32.0	31.2	22.66274
18	-11.142	-19.389	286.74552	-60.5	9.9	-82.7	39.9	13.37631	0.836	-90.1	68.8	36.8	34.8	31.0	27.66118
19	-12.105	-19.196	298.07999	-52.4	10.7	-84.8	41.8	13.85273	0.801	-96.2	69.1	37.2	38.4	29.4	29.73201
20	-13.148	-18.973	313.69816	-45.8	11.7	-87.0	43.7	14.39207	0.762	-102.1	69.4	38.2	42.6	26.5	32.28004
21	-13.091	-20.063	297.70782	-39.4	9.8	-86.5	45.4	13.83051	0.803	-101.0	68.3	43.3	38.3	20.6	32.20035
22	-13.044	-21.064	286.00552	-31.6	7.8	-86.2	47.2	13.33546	0.839	-100.0	67.4	48.6	34.5	14.6	29.56385
23	-13.005	-21.992	278.03169	-22.3	5.8	-85.8	49.0	12.89357	0.872	-99.3	66.5	53.8	31.5	8.6	27.42155
24	-12.973	-22.861	273.30829	-11.5	3.8	-85.5	50.8	12.44950	0.901	-98.6	65.6	59.0	29.6	2.7	25.64972
25	-12.067	-22.914	261.26528	-14.4	3.5	-84.1	48.9	12.12092	0.937	-94.4	65.5	58.5	23.5	4.6	27.46764
26	-11.221	-22.962	252.58224	-19.2	3.3	-82.6	47.0	11.78315	0.971	-90.1	65.3	58.4	17.5	5.8	25.66526
27	-10.425	-23.006	246.92274	-28.5	3.1	-81.2	43.6	11.46768	0.999	-85.8	65.2	58.5	11.8	6.3	24.15196
28	-9.767	-23.041	244.21056	-46.5	3.0	-80.0	43.4	10.95964	0.976	-82.1	65.1	58.9	7.6	6.1	19.95957

JULY 31, 1964 13 HR 24 MIN 9 SEC 23 MS TAB NO 180 ATLAS PHOTO NO 180 POD SEQUENCE NO 366

TRAJECTORY DATA				SEC TO IMPACT			ALT			LAT			LON			R			V			PTH		AZ	
				99.776			230.69821			-9.230			-23.633			1966.154			2.485			-66.146		113.300	
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT										
1	-10.675	-20.491	255.61538	-36.5	6.2	-83.9	45.3	12.02499	0.899	-93.6	67.7	42.5	27.3	24.7	0	0-1									
2	-11.158	-21.260	250.50804	-46.7	6.6	-82.7	43.3	11.90522	0.910	-90.1	67.0	47.6	24.5	18.3	27.14329	1-2									
3	-10.399	-22.143	238.49748	-47.7	4.7	-81.1	43.2	11.23237	0.972	-85.5	66.0	53.2	15.7	12.5	34.93093	2-3									
4	-10.357	-21.354	244.50800	-58.7	6.2	-81.0	41.5	11.56419	0.940	-85.1	66.8	47.8	20.6	18.7	23.55146	3-4									
5	-10.313	-20.511	253.52801	-65.5	7.7	-80.8	39.8	11.92976	0.906	-84.6	67.6	42.5	26.2	24.9	25.15129	4-5									
6	-11.139	-20.386	269.04576	-54.7	8.2	-82.7	41.6	12.30049	0.875	-90.1	67.8	42.2	29.4	24.6	25.31390	5-6									
7	-12.023	-20.245	269.90213	-46.2	8.9	-84.6	43.5	12.71141	0.841	-95.6	68.1	42.5	33.5	23.2	27.09416	6-7									
8	-12.013	-21.155	259.67371	-38.0	7.1	-84.4	45.2	12.28139	0.877	-95.1	67.2	47.9	29.2	17.0	26.97866	7-8									
9	-12.006	-22.003	252.77548	-27.6	5.3	-84.3	46.9	11.89436	0.909	-94.7	66.3	53.2	25.8	10.8	25.12496	8-9									
10	-11.177	-22.077	244.13212	-35.3	5.0	-82.7	45.0	11.54782	0.942	-90.1	66.2	53.0	20.4	12.0	25.19387	9-10									
11	-10.399	-22.143	238.49748	-47.7	4.7	-81.1	43.2	11.23237	0.972	-85.5	66.0	53.2	15.7	12.5	23.66728	10-11									
12	-9.811	-22.921	232.56219	-46.7	3.0	-80.0	43.3	10.43985	0.976	-82.1	65.2	58.9	7.7	6.2	29.23597	11-12									
13	-9.756	-22.196	235.78999	-64.7	4.4	-79.8	41.6	10.97923	0.995	-81.5	65.9	53.7	12.7	12.2	21.70401	12-13									
14	-9.697	-21.428	241.58710	-72.5	5.8	-79.6	39.9	11.29145	0.964	-80.8	66.7	48.4	18.4	18.7	22.99821	13-14									
15	-9.633	-20.609	250.26929	-76.7	7.2	-79.3	38.2	11.63443	0.929	-79.9	67.5	43.1	24.4	24.3	24.51753	14-15									
16	-9.563	-19.731	262.17409	-79.3	8.6	-79.0	36.5	12.01458	0.892	-78.9	68.3	38.0	30.4	30.4	26.32333	15-16									
17	-10.265	-19.604	265.92206	-69.9	9.1	-80.7	38.1	12.33631	0.868	-84.1	68.5	37.2	31.9	31.2	21.59038	16-17									
18	-11.120	-19.442	273.14873	-60.5	9.8	-82.7	39.9	12.74207	0.837	-90.1	68.8	36.8	34.7	30.9	26.34909	17-18									
19	-12.037	-19.258	283.91454	-52.5	10.7	-84.8	41.7	13.19444	0.802	-96.2	69.0	37.2	38.3	29.4	28.30891	18-19									
20	-13.030	-19.048	298.71846	-45.9	11.7	-87.0	43.6	13.70481	0.764	-102.1	69.3	38.2	42.5	26.5	32.28004	19-20									
21	-12.976	-20.084	283.52937	-39.5	9.7	-86.6	45.3	12.70846	0.840	-100.0	68.3	43.3	38.2	20.6	30.64550	20-21									
22	-12.931	-21.037	272.38749	-31.8	7.7	-86.2	47.0	12.27855	0.872	-99.2	67.4	48.6	34.4	14.6	28.15477	21-22									
23	-12.894	-21.921	264.77158	-22.5	5.8	-85.9	48.7	11.89718	0.902	-98.6	65.5	59.0	29.5	2.9	24.43208	22-23									
24	-12.863	-22.748	260.23277	-11.7	3.8	-85.6	50.4	11.54279	0.938	-94.4	65.6	58.5	23.5	4.3	26.13845	23-24									
25	-12.002	-22.799	248.80395	-14.7	3.5	-84.1	48.6	11.22187	0.970	-90.1	65.4	58.4	17.5	5.9	24.43661	24-25									
26	-11.196	-22.845	240.55036	-19.6	3.3	-82.7	46.7	10.92431	1.000	-85.8	65.3	58.5	11.9	6.4	23.00184	25-26									
27	-10.438	-22.887	235.15838	-28.9	3.2	-81.2	43.5	10.43985	0.976	-82.1	65.2	58.9	7.7	6.2	19.00989	26-27									
28	-9.811	-22.921	232.56219	-46.7	3.0	-80.0	43.3																		

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JULY 31, 1964 13 HR 24 MIN 14 SEC 143 MS

TAB NO 181

ATLAS PHOTO NO 181

POD SEQUENCE NO 368

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				94.656		219.05190	-9.294	-23.495	1954.507	2.491	-66.054	115.276				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.671	-20.500	242.74345	-36.7	6.2	-83.9	45.1	11.42455	0.899	-93.6	67.7	42.5	27.2	24.6	0.	0-1
2	-11.135	-21.222	238.01265	-46.8	6.6	-82.7	43.2	11.31139	0.910	-90.1	67.0	47.6	24.5	18.4	25.65490	1-2
3	-10.413	-22.062	226.57534	-47.8	4.7	-81.1	43.1	10.67088	0.971	-85.5	66.1	53.2	15.7	12.5	33.19570	2-3
4	-10.373	-21.311	232.30931	-58.7	6.2	-81.0	41.5	10.98723	0.940	-85.1	66.9	47.8	20.7	18.7	22.38133	3-4
5	-10.331	-20.510	240.88738	-65.4	7.7	-80.8	39.8	11.33494	0.905	-84.6	67.6	42.5	26.2	24.9	23.89968	4-5
6	-11.117	-20.391	247.08143	-54.7	8.2	-82.7	41.6	11.68727	0.875	-90.1	67.8	42.2	29.4	24.6	24.05208	5-6
7	-11.956	-20.258	256.42456	-46.2	8.9	-84.6	43.4	12.07666	0.842	-95.6	68.0	42.5	33.5	23.2	25.73451	6-7
8	-11.946	-21.123	246.70360	-38.1	7.1	-84.4	45.0	11.66796	0.877	-95.1	67.2	47.9	29.2	17.0	25.63256	7-8
9	-11.940	-21.928	240.12696	-27.8	5.4	-84.3	46.6	11.29917	0.909	-94.7	66.4	53.2	25.8	10.9	23.87526	8-9
10	-11.153	-21.998	231.93105	-35.5	5.0	-82.7	44.9	10.97069	0.941	-90.1	66.3	53.0	20.4	12.1	23.92883	9-10
11	-10.413	-22.062	226.57534	-47.8	4.7	-81.1	43.1	10.67088	0.971	-85.5	66.1	53.2	15.7	12.5	22.48490	10-11
12	-9.855	-22.801	220.88884	-47.0	3.1	-80.0	43.2	9.91868	0.977	-82.1	65.3	58.9	7.8	6.4	27.78138	11-12
13	-9.802	-22.112	223.98924	-64.6	4.5	-79.8	41.6	10.42973	0.995	-81.5	66.0	53.7	12.8	12.3	20.62130	12-13
14	-9.746	-21.382	229.51918	-72.3	5.9	-79.6	40.0	10.72737	0.964	-80.8	66.7	48.4	18.5	18.3	21.85401	13-14
15	-9.685	-20.604	237.77578	-76.5	7.2	-79.3	38.3	11.05359	0.929	-79.9	67.5	43.1	24.4	24.3	23.29603	14-15
16	-9.619	-19.770	249.07442	-79.1	8.6	-78.9	36.7	11.41423	0.892	-78.9	68.3	38.0	30.3	30.3	25.00338	15-16
17	-10.286	-19.649	252.65008	-69.9	9.1	-80.6	38.2	11.72061	0.868	-84.1	68.5	37.2	31.9	31.1	20.51475	16-17
18	-11.098	-19.495	259.51376	-60.4	9.8	-82.7	39.9	12.10604	0.837	-90.1	68.7	36.8	34.7	30.9	25.03327	17-18
19	-11.969	-19.321	269.71240	-52.5	10.6	-84.8	41.7	12.53444	0.803	-96.2	69.0	37.2	38.2	29.3	26.88321	18-19
20	-12.912	-19.122	283.70728	-45.9	11.6	-87.0	43.5	13.01611	0.766	-102.1	69.2	38.2	42.3	26.4	29.13657	19-20
21	-14.801	-20.101	258.73727	-31.9	9.4	-86.6	45.1	12.51154	0.805	-101.0	68.3	43.3	38.1	20.6	29.08907	20-21
22	-12.818	-21.011	258.73727	-31.9	7.7	-86.3	46.8	12.06396	0.841	-100.0	67.4	48.6	34.3	14.7	25.74238	21-22
23	-12.783	-21.850	251.48262	-22.7	5.8	-86.0	48.4	11.66228	0.873	-99.2	66.6	53.8	31.4	8.8	24.81721	22-23
24	-12.753	-22.635	247.13311	-12.0	3.8	-85.7	50.0	11.29826	0.902	-98.6	65.8	59.0	29.4	3.0	23.21124	23-24
25	-11.935	-22.684	236.31576	-15.0	3.6	-84.2	48.3	10.96362	0.938	-94.3	65.7	58.5	23.5	4.9	24.80847	24-25
26	-11.170	-22.728	228.49103	-20.0	3.4	-82.7	46.5	10.95930	0.970	-90.1	65.5	58.4	17.6	6.0	23.20572	25-26
27	-10.450	-22.768	223.36745	-29.3	3.2	-81.3	43.3	10.37945	1.000	-85.8	65.4	58.5	12.0	6.5	21.84907	26-27
28	-9.855	-22.801	220.88884	-47.0	3.1	-80.0	43.2	9.91868	0.977	-82.1	65.3	58.9	7.8	6.4	18.05799	27-28

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TAB NO 182

ATLAS PHOTO NO 182

POD SEQUENCE NO 370

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				89.537		207.38576	-9.359	-23.355	1942.841	2.497	-65.962	115.252				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.667	-20.509	229.84639	-36.8	6.2	-83.9	45.0	10.82250	0.899	-93.6	67.7	42.6	27.1	24.6	0.	0-1
2	-11.111	-21.185	225.48198	-46.8	6.6	-82.7	43.2	10.71588	0.910	-90.1	67.0	47.6	24.5	18.4	24.18326	1-2
3	-10.427	-21.980	214.62222	-47.9	4.7	-81.1	43.0	10.10793	0.971	-85.5	66.2	53.2	15.8	12.6	31.45484	2-3
4	-10.390	-21.269	220.07576	-58.7	6.2	-81.0	41.5	10.40863	0.940	-85.1	66.9	47.8	20.7	18.7	21.20723	3-4
5	-10.350	-20.510	228.20908	-65.4	7.7	-80.8	39.9	10.73836	0.905	-84.6	67.6	42.5	26.2	24.9	22.64391	4-5
6	-11.094	-20.397	234.07900	-54.7	8.2	-82.7	41.6	11.07224	0.875	-90.1	67.8	42.2	29.4	24.6	22.78662	5-6
7	-11.889	-20.271	242.91051	-46.3	8.9	-84.6	43.3	11.44020	0.842	-95.6	68.0	42.5	33.4	23.2	24.37212	6-7
8	-11.880	-21.090	233.69950	-38.3	7.1	-84.5	44.9	11.05291	0.877	-95.1	67.2	47.9	29.2	17.1	24.28245	7-8
9	-11.873	-21.854	227.44833	-28.0	5.4	-84.4	46.4	10.70257	0.909	-94.7	66.5	53.2	25.7	11.0	22.62161	8-9
10	-11.128	-21.920	219.69869	-35.7	5.0	-82.7	44.7	10.39209	0.941	-90.1	66.3	53.0	20.4	12.2	22.66138	9-10
11	-10.427	-21.980	214.62222	-47.9	4.7	-81.1	43.0	10.10793	0.971	-85.5	66.2	53.2	15.8	12.6	21.29958	10-11
12	-9.899	-22.681	209.19026	-47.2	3.1	-80.0	43.2	9.39614	0.977	-82.1	65.5	58.9	8.0	6.5	26.32238	11-12
13	-9.849	-22.028	212.15876	-64.5	4.5	-79.8	41.6	9.87883	0.995	-81.5	66.1	53.7	12.9	12.3	19.53549	12-13
14	-9.795	-21.337	217.41780	-72.2	5.9	-79.5	40.0	10.16173	0.963	-80.8	66.8	48.4	18.5	18.3	20.70605	13-14
15	-9.737	-20.600	225.24611	-76.4	7.3	-79.3	38.4	10.47107	0.929	-79.9	67.5	43.1	24.4	24.3	22.07051	14-15
16	-9.675	-19.809	235.93723	-79.0	8.6	-78.9	36.9	10.81216	0.892	-78.9	68.3	38.0	30.3	30.3	23.67985	15-16
17	-10.307	-19.695	239.33910	-69.8	9.1	-80.6	38.3	11.10311	0.868	-84.1	68.4	37.2	31.9	31.1	19.43582	16-17
18	-11.076	-19.549	245.83973	-60.4	9.8	-82.6	40.0	11.46818	0.838	-90.1	68.6	36.8	34.6	30.8	23.71392	17-18
19	-11.901	-19.385	255.47361	-52.5	10.6	-84.8	41.7	11.87274	0.804	-96.2	68.9	37.2	38.1	29.3	25.45513	18-19
20	-12.793	-19.198	268.66587	-46.0	11.5	-87.0	43.4	12.32603	0.767	-102.1	69.2	38.2	42.2	26.3	27.56519	19-20
21	-12.745	-20.129	255.07392	-39.7	9.6	-86.6	45.0	11.84980	0.806	-101.0	68.2	43.3	38.0	20.6	27.53100	20-21
22	-12.705	-20.985	245.05698	-32.1	7.7	-86.3	46.6	11.04475	0.874	-99.2	67.4	48.6	34.3	14.7	25.32668	21-22
23	-12.671	-21.780	238.16718	-22.9	5.7	-86.0	48.1	11.04475	0.874	-99.2	66.6	53.8	31.3	8.9	23.50966	22-23
24	-12.643	-22.523	234.01208	-12.3	3.8	-85.8	49.7	10.69837	0.903	-98.6	65.9	59.0	29.3	3.1	21.98736	23-24
25	-11.869	-22.569	223.80251	-15.3	3.6	-84.3	48.0	10.38288	0.938	-94.3	65.8	58.5	23.4	5.0	23.47823	24-25
26	-11.145	-22.611	216.40525	-20.3	3.4	-82.7	46.3	10.09550	0.970	-90.1	65.7	58.4	17.6	6.2	21.97303	25-26
27	-10.462	-22.650	211.55020	-29.7	3.2	-81.3	44.6	9.83159	1.000	-85.8	65.6	58.5	12.1	6.6	20.69378	26-27
28	-9.899	-22.681	209.19026	-47.2	3.1	-80.0	43.2	9.39614	0.977	-82.1	65.5	58.9	8.0	6.5	17.10389	27-28

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JULY 31, 1964 13 HR 24 MIN 24 SEC 383 MS TAB NO 183 ATLAS PHOTO NO 183 POD SEQUENCE NO 372

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				84.417			195.69992	-9.425	-23.213	1931.155	1.503	-65.869	115.227			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.663	-20.517	216.92419	-37.0	6.2	-84.0	44.8	10.21877	0.899	-93.6	67.7	42.6	27.1	24.5	0.	0-1
2	-11.087	-21.147	212.91505	-46.9	6.6	-82.7	43.1	10.11864	0.910	-90.1	67.1	47.6	24.5	18.4	22.72199	1-2
3	-10.441	-21.899	202.63751	-48.0	4.7	-81.1	43.0	9.54349	0.971	-85.5	66.3	53.2	15.9	12.7	29.70819	2-3
4	-10.406	-21.228	207.80731	-58.7	6.2	-81.0	41.5	9.82838	0.939	-85.1	66.9	47.8	20.8	18.8	20.02928	3-4
5	-10.368	-20.511	215.49365	-65.3	7.7	-80.8	40.0	10.14002	0.905	-84.6	67.6	42.5	26.2	24.9	21.38416	4-5
6	-11.070	-20.404	221.03814	-54.8	8.2	-82.7	41.6	10.45540	0.876	-90.1	67.8	42.2	29.4	24.6	21.51755	5-6
7	-11.821	-20.285	229.35859	-46.4	8.8	-84.6	43.2	10.80195	0.843	-95.6	68.0	42.5	33.4	23.2	23.00658	6-7
8	-11.812	-21.058	220.65938	-38.4	7.1	-84.5	44.7	10.43616	0.877	-95.1	67.2	47.9	29.2	17.1	22.97841	7-8
9	-11.806	-21.779	214.73711	-28.2	5.4	-84.4	45.2	10.10443	0.909	-94.7	66.5	53.2	25.7	11.1	21.36393	8-9
10	-11.103	-21.842	207.43351	-35.9	5.0	-82.8	44.6	9.81193	0.941	-90.1	66.4	53.0	20.5	12.3	21.39107	9-10
11	-10.441	-21.899	202.63751	-48.0	4.7	-81.1	43.0	9.54349	0.971	-85.5	66.3	53.2	15.9	12.7	20.11106	10-11
12	-9.942	-22.561	197.46600	-47.5	3.1	-80.0	43.1	8.87217	0.977	-82.1	65.6	58.9	8.1	6.6	24.85879	11-12
13	-9.895	-21.945	200.29862	-64.4	4.5	-79.8	41.6	9.32657	0.994	-81.5	66.2	53.7	13.0	12.4	18.44663	12-13
14	-9.844	-21.292	205.28364	-72.0	5.9	-79.5	40.1	9.59457	0.963	-80.8	66.8	48.4	18.6	18.4	19.55448	13-14
15	-9.790	-20.595	212.68153	-76.2	7.3	-79.2	38.6	9.88694	0.929	-79.9	67.5	43.1	24.4	24.3	20.84132	14-15
16	-9.731	-19.849	222.76468	-78.9	8.7	-78.9	37.0	10.20848	0.893	-78.9	68.2	38.0	30.2	30.2	22.35323	15-16
17	-10.327	-19.741	225.99049	-69.7	9.2	-80.6	38.4	10.48386	0.869	-84.1	68.4	37.2	31.8	31.0	18.35370	16-17
18	-11.054	-19.603	232.12705	-60.4	9.8	-82.6	40.0	10.82852	0.839	-90.1	68.6	36.9	34.5	30.8	22.39084	17-18
19	-11.832	-19.449	241.19748	-52.5	10.5	-84.8	41.7	11.20930	0.805	-96.2	68.8	37.2	38.0	29.2	24.02423	18-19
20	-12.673	-19.274	253.59219	-46.0	11.4	-87.0	43.3	11.63446	0.769	-102.1	69.1	38.2	42.1	26.2	25.99361	19-20
21	-12.629	-20.151	240.79593	-39.8	9.5	-86.6	44.8	11.18647	0.807	-101.0	68.2	43.3	37.9	20.6	25.97134	20-21
22	-12.591	-20.959	231.34336	-32.2	7.6	-86.4	46.4	10.78661	0.842	-100.0	67.4	48.6	34.2	14.8	23.90768	21-22
23	-12.559	-21.709	224.82160	-23.1	5.7	-86.1	47.8	10.42583	0.874	-99.2	66.7	53.8	31.3	9.0	22.19836	22-23
24	-12.532	-22.411	220.86552	-12.5	3.8	-85.9	49.3	10.09731	0.904	-98.6	66.0	59.0	29.3	3.3	20.76018	23-24
25	-11.802	-22.455	211.26130	-15.6	3.6	-84.3	47.7	9.80105	0.938	-94.3	65.9	58.5	23.4	5.1	22.14669	24-25
26	-11.118	-22.495	204.29107	-20.7	3.4	-82.8	46.1	9.53038	0.970	-90.1	65.8	58.4	17.6	6.3	20.73810	25-26
27	-10.474	-22.532	199.70555	-30.1	3.2	-81.3	44.4	9.28114	1.000	-85.8	65.7	58.5	12.1	6.7	19.53583	26-27
28	-9.942	-22.561	197.46600	-47.5	3.1	-80.0	43.1	8.87217	0.977	-82.1	65.6	58.9	8.1	6.6	16.14736	27-28

TAB NO 184													ATLAS PHOTO NO 184				POD SEQUENCE NO 374				
TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LON		R		V		PTH		AZ	
				79.297				183.99377		-9.492		-23.070		1919.449		2.509		-65.774		115.201	
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-P					
1	-10.659	-20.525	203.97622	-37.1	6.2	-84.0	44.6	9.61326	0.899	-93.6	67.7	42.7	27.0	24.5	0.	0-1					
2	-11.062	-21.111	200.31012	-47.0	6.6	-82.7	43.0	9.51960	0.910	-90.1	67.1	47.6	24.6	18.5	21.27200	1-2					
3	-10.455	-21.818	190.61985	-48.1	4.8	-81.2	42.9	8.97750	0.970	-85.5	66.4	53.2	16.0	12.8	27.95537	2-3					
4	-10.421	-21.186	195.50235	-58.7	6.3	-81.0	41.5	9.24640	0.939	-85.1	67.0	47.8	20.8	18.8	18.84727	3-4					
5	-10.386	-20.512	202.73927	-65.3	7.7	-80.8	40.0	9.53986	0.905	-84.6	67.6	42.5	26.2	24.9	20.12023	4-5					
6	-11.047	-20.411	207.95683	-54.8	8.2	-82.7	41.6	9.83664	0.876	-90.1	67.8	42.2	29.3	24.6	20.24434	5-6					
7	-11.753	-20.300	215.76659	-46.4	8.8	-84.6	43.1	10.16182	0.843	-95.6	68.0	42.5	33.3	23.2	21.63766	6-7					
8	-11.745	-21.027	207.58134	-38.5	7.1	-84.5	44.6	9.81763	0.878	-95.1	67.3	47.9	29.1	17.1	21.57015	7-8					
9	-11.739	-21.705	201.99167	-28.4	5.4	-84.5	46.0	9.50469	0.909	-94.7	66.6	53.3	25.7	11.1	20.10199	8-9					
10	-11.077	-21.764	195.13402	-36.1	5.0	-82.8	44.4	9.23015	0.941	-90.1	66.5	53.0	20.5	12.4	20.11768	9-10					
11	-10.455	-21.818	190.61985	-48.1	4.8	-81.2	42.9	8.97750	0.970	-85.5	66.4	53.2	16.0	12.8	18.91905	10-11					
12	-9.986	-22.441	185.71501	-47.7	3.1	-80.0	43.0	8.34671	0.977	-82.1	65.7	58.9	8.2	6.7	23.39041	11-12					
13	-9.941	-21.861	188.40760	-64.3	4.6	-79.8	41.5	8.77286	0.994	-81.5	66.3	53.7	13.1	12.5	17.35456	12-13					
14	-9.893	-21.247	193.11522	-71.9	5.9	-79.5	40.1	9.02581	0.963	-80.8	66.9	48.4	18.6	18.4	18.39917	13-14					
15	-9.842	-20.592	200.08039	-76.1	7.3	-79.2	38.7	9.30111	0.929	-79.9	67.5	43.2	24.4	24.4	19.60820	14-15					
16	-9.786	-19.890	209.55482	-78.7	8.7	-78.8	37.2	9.60310	0.893	-78.9	68.2	38.0	30.2	30.2	21.02327	15-16					
17	-10.347	-19.787	212.60214	-69.6	9.2	-80.6	38.6	9.86277	0.869	-84.0	68.3	37.2	31.8	31.0	17.26816	16-17					
18	-11.031	-19.658	218.37337	-60.4	9.8	-82.6	40.1	10.18695	0.839	-90.1	68.5	36.9	34.5	30.7	21.06364	17-18					
19	-11.763	-19.513	226.88148	-52.6	10.5	-84.8	41.7	10.54400	0.806	-96.2	68.7	37.2	37.9	29.1	22.59045	18-19					
20	-12.553	-19.350	238.48340	-46.1	11.3	-87.0	43.2	10.94129	0.770	-102.1	69.0	38.2	42.0	26.2	24.42129	19-20					
21	-12.512	-20.174	226.48107	-39.9	9.5	-86.7	44.7	10.52144	0.808	-100.9	68.2	43.3	37.8	20.6	24.40973	20-21					
22	-12.476	-20.934	217.59432	-32.3	7.6	-86.4	46.1	10.14552	0.843	-100.0	67.4	48.6	34.1	14.8	22.48503	21-22					
23	-12.446	-21.639	211.44408	-23.3	5.7	-86.2	47.6	9.80543	0.875	-99.2	66.8	53.8	31.2	9.1	20.88308	22-23					
24	-12.421	-22.299	207.69190	-12.8	3.9	-86.0	49.0	9.49502	0.904	-98.6	66.1	59.0	29.2	3.4	19.52948	23-24					
25	-11.735	-22.341	198.69065	-16.0	3.6	-84.4	47.4	9.21785	0.938	-94.3	66.0	58.5	23.4	5.3	20.81395	24-25					
26	-11.092	-22.378	192.14719	-21.1	3.4	-82.8	45.8	8.96386	0.970	-90.1	65.9	58.4	17.6	6.4	19.50061	25-26					
27	-10.486	-22.413	187.83232	-30.5	3.3	-81.3	44.3	8.72935	0.999	-85.8	65.8	58.5	12.2	6.8	18.37493	26-27					
28	-9.986	-22.441	185.71501	-47.7	3.1	-80.0	43.0	8.34671	0.977	-82.1	65.7	58.9	8.2	6.7	15.18839	27-28					

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JULY 31, 1964 13 HR 24 MIN 34 SEC 623 MS

TAB NO 185

ATLAS PHOTO NO 185

POD SEQUENCE NO 376

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
PHOTO DATA				74.177				172.26740	-9.559	-22.924	1907.723	2.516	-65.679	115.176		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.656	-20.532	191.00240	-37.2	6.2	-84.0	44.5	9.00579	0.899	-93.6	67.6	42.7	26.9	24.4	0.	0-1
2	-11.037	-21.075	187.66298	-47.1	6.6	-82.8	42.9	8.91855	0.909	-90.1	67.2	47.6	24.6	18.5	19.83887	1-2
3	-10.468	-21.738	178.56658	-48.3	4.8	-81.2	42.8	8.40983	0.970	-85.5	66.4	53.2	16.0	12.8	26.19541	2-3
4	-10.437	-21.146	183.15733	-58.7	6.3	-81.0	41.4	8.66252	0.939	-85.1	67.0	47.9	20.9	18.9	17.66069	3-4
5	-10.403	-20.514	189.94136	-65.2	7.7	-80.8	40.1	8.93765	0.905	-84.6	67.6	42.5	26.2	24.9	18.85136	4-5
6	-11.022	-20.420	194.82974	-54.8	8.2	-82.7	41.5	9.21571	0.876	-90.1	67.8	42.2	29.3	24.6	18.96646	5-6
7	-11.684	-20.315	202.12821	-46.5	8.8	-84.7	43.0	9.51950	0.844	-95.6	68.0	42.5	33.2	23.1	20.26440	6-7
8	-11.676	-20.996	194.46036	-38.6	7.1	-84.6	44.4	9.19706	0.878	-95.1	67.3	47.9	29.1	17.2	20.20670	7-8
9	-11.671	-21.631	189.20811	-28.6	5.4	-84.5	45.8	8.90316	0.909	-94.7	66.7	53.3	25.7	11.2	18.83505	8-9
10	-11.051	-21.687	182.75697	-36.3	5.1	-82.8	44.3	8.64659	0.941	-90.1	66.6	53.1	20.5	12.4	18.84075	9-10
11	-10.468	-21.738	178.56658	-48.3	4.8	-81.2	42.8	8.40983	0.970	-85.5	66.4	53.2	16.0	12.8	17.72335	10-11
12	-10.029	-22.322	173.93583	-47.9	3.2	-80.0	42.9	7.81963	0.978	-82.1	65.8	58.9	8.3	6.8	21.91674	11-12
13	-9.987	-21.778	176.48347	-64.2	4.6	-79.7	41.5	8.21762	0.994	-81.5	66.4	53.7	13.2	12.6	16.25901	12-13
14	-9.942	-21.202	180.90949	-71.7	6.0	-79.5	40.2	8.45531	0.962	-80.8	66.9	48.4	18.7	18.5	17.23961	13-14
15	-9.894	-20.589	187.43867	-75.9	7.4	-79.2	38.8	8.71341	0.929	-79.9	67.5	43.2	24.4	24.4	18.37058	14-15
16	-9.841	-19.931	196.30245	-78.6	8.7	-78.8	37.4	8.99578	0.894	-78.9	68.2	38.0	30.2	30.2	19.68902	15-16
17	-10.367	-19.835	199.16821	-69.6	9.2	-80.6	38.7	9.23957	0.870	-84.0	68.3	37.2	31.7	30.9	16.17847	16-17
18	-11.008	-19.714	204.57197	-60.4	9.8	-82.6	40.2	9.54315	0.840	-90.1	68.5	36.9	34.4	30.6	19.73188	17-18
19	-11.693	-19.579	212.51771	-52.6	10.4	-84.8	41.6	9.87648	0.807	-96.1	68.7	37.2	37.9	29.1	21.15218	18-19
20	-12.433	-19.427	223.33019	-46.1	11.2	-87.0	43.2	10.24608	0.772	-102.1	68.9	38.2	41.8	26.1	22.84704	19-20
21	-12.394	-20.196	212.12174	-40.0	9.4	-86.7	44.6	9.85435	0.809	-100.9	68.1	43.3	37.7	20.5	22.84456	20-21
22	-12.361	-20.909	203.80394	-32.5	7.6	-86.5	45.9	9.50221	0.844	-100.0	67.5	48.6	34.1	14.9	21.05756	21-22
23	-12.333	-21.570	198.02980	-23.5	5.7	-86.2	47.3	9.18334	0.875	-99.2	66.8	53.8	31.1	9.2	17.55298	22-23
24	-12.309	-22.188	194.48752	-13.1	3.9	-86.1	48.6	8.89135	0.905	-98.6	66.2	59.0	29.1	3.5	18.29465	23-24
25	-11.667	-22.227	186.08762	-16.3	3.7	-84.5	47.1	8.63316	0.938	-94.3	66.1	58.6	23.4	5.4	19.47924	24-25
26	-11.065	-22.262	179.97123	-21.4	3.5	-82.9	45.6	8.39585	0.970	-90.1	66.0	58.4	17.7	6.5	18.26032	25-26
27	-10.498	-22.295	175.92866	-30.9	3.3	-81.3	44.2	8.17615	0.999	-85.8	65.9	58.5	12.3	7.0	17.21062	26-27
28	-10.029	-22.322	173.93583	-47.9	3.2	-80.0	42.9	7.81963	0.978	-82.1	65.8	58.9	8.3	6.8	14.22685	27-28

JULY 31, 1964 13 HR 24 MIN 39 SEC 742 MS

TAB NO 186

ATLAS PHOTO NO 186

POD SEQUENCE NO 378

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				69.057			160.52051	-9.627	-22.777	1895.976	2.522	-65.582	115.149			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.653	-20.539	178.00249	-37.4	6.2	-84.1	44.3	8.39659	0.899	-93.6	67.6	42.8	26.8	24.3	0.	0-1
2	-11.011	-21.039	174.97861	-47.2	6.6	-82.8	42.8	8.31574	0.909	-90.1	67.2	47.6	24.6	18.5	18.41450	1-2
3	-10.481	-21.657	166.48043	-48.4	4.8	-81.2	42.7	7.84062	0.970	-85.5	66.5	53.3	16.1	12.9	24.42948	2-3
4	-10.452	-21.105	170.77626	-58.6	6.3	-81.0	41.4	8.07695	0.938	-85.1	67.1	47.9	20.9	18.9	16.47015	3-4
5	-10.420	-20.516	177.10540	-65.1	7.7	-80.8	40.1	8.33365	0.905	-84.6	67.6	42.5	26.2	24.9	17.57853	4-5
6	-10.998	-20.428	181.66347	-54.8	8.2	-82.7	41.5	8.59294	0.876	-90.1	67.8	42.2	29.3	24.6	17.68468	5-6
7	-11.614	-20.331	188.45152	-46.6	7.1	-84.6	44.3	8.87538	0.844	-95.6	67.9	42.5	33.2	23.1	18.88802	6-7
8	-11.607	-20.966	181.30266	-38.8	5.4	-84.6	45.6	8.57476	0.878	-95.1	67.3	47.9	29.1	17.2	18.83937	7-8
9	-11.602	-21.558	176.35099	-28.8	5.4	-84.6	45.6	8.30004	0.909	-94.7	66.7	53.3	25.7	11.3	17.56407	8-9
10	-11.025	-21.610	170.42596	-36.5	5.1	-82.8	44.1	8.06142	0.941	-90.1	66.6	53.1	20.6	12.5	17.56096	9-10
11	-10.481	-21.657	166.48043	-48.4	4.8	-81.2	42.7	7.84062	0.970	-85.5	66.5	53.3	16.1	12.9	16.52408	10-11
12	-10.071	-22.202	162.12956	-48.1	3.2	-80.0	42.8	7.29105	0.978	-82.1	66.0	58.9	8.4	6.9	20.43848	11-12
13	-10.032	-21.696	164.52834	-64.1	4.6	-79.7	41.5	7.66094	0.993	-81.5	66.4	53.7	13.3	12.7	15.16027	12-13
14	-9.990	-21.158	168.66975	-71.6	6.0	-79.5	40.2	7.88323	0.962	-80.8	67.0	48.4	18.7	18.5	16.07635	13-14
15	-9.945	-20.586	174.76106	-75.8	7.4	-79.1	38.9	8.12404	0.929	-79.9	67.5	43.2	24.4	24.4	17.12920	14-15
16	-9.897	-19.973	183.01396	-78.5	8.7	-78.8	37.6	8.38681	0.894	-78.9	68.1	38.0	30.1	30.1	18.35178	15-16
17	-10.387	-19.883	185.69605	-69.5	9.2	-80.5	38.8	8.61460	0.870	-84.0	68.3	37.2	31.7	30.9	15.08551	16-17
18	-10.984	-19.771	190.73153	-60.4	9.7	-82.6	40.2	8.89752	0.840	-90.1	68.4	36.9	34.4	30.6	18.39620	17-18
19	-11.623	-19.645	198.11659	-52.6	10.4	-84.7	41.6	9.20722	0.808	-96.1	68.6	37.2	37.8	29.0	19.71152	18-19
20	-12.312	-19.505	208.14508	-46.2	11.2	-87.0	43.1	9.54940	0.774	-102.1	68.8	38.2	41.7	26.0	21.27247	19-20
21	-12.276	-20.223	197.72831	-40.1	9.3	-86.7	44.4	9.18566	0.810	-100.9	68.1	43.3	37.6	20.5	21.27804	20-21
22	-12.245	-20.885	189.97960	-32.6	7.5	-86.5	45.7	8.85792	0.844	-100.0	67.5	48.6	34.0	14.9	19.62690	21-22
23	-12.219	-21.501	184.58470	-23.7	5.7	-86.3	47.0	8.55982	0.876	-99.2	66.9	53.8	31.1	9.2	18.23916	22-23
24	-12.196	-22.076	181.25677	-13.3	3.9	-86.2	48.3	8.28646	0.906	-98.6	66.3	59.0	29.0	3.7	17.05644	23-24
25	-11.598	-22.113	173.45549	-16.6	3.7	-84.5	46.8	8.04712	0.939	-94.3	66.2	58.6	23.3	5.5	18.14363	24-25
26	-11.037	-22.146	167.76560	-21.8	3.5	-82.9	45.4	7.82646	0.970	-90.1	66.1	58.4	17.7	6.6	17.01741	25-26
27	-10.509	-22.177	163.99624	-31.3	3.3	-81.3	44.0	7.62161	0.999	-85.8	66.0	58.5	12.4	7.1	16.04366	26-27
28	-10.071	-22.202	162.12956	-48.1	3.2	-80.0	42.8	7.29105	0.978	-82.1	66.0	58.9	8.4	6.9	13.26279	27-28

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JULY 31, 1964 13 HR 24 MIN 44 SEC 862 MS

TAB NO 187

ATLAS PHOTO NO 187

POD SEQUENCE NO 380

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				63.937		148.75308	-9.696	-22.628	1884.208	2.528	-65.485	115.123				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.650	-20.546	164.97638	-37.5	6.2	-84.1	44.2	7.78573	0.899	-93.6	67.6	42.9	26.8	24.3	0.	0-1
2	-10.986	-21.003	162.25847	-47.2	6.6	-82.8	42.8	7.71122	0.909	-90.1	67.2	47.6	24.6	18.6	16.99489	1-2
3	-10.494	-21.577	154.36218	-48.5	4.8	-81.2	42.6	7.26989	0.969	-85.5	66.6	53.3	16.2	13.0	22.65805	2-3
4	-10.467	-21.065	158.36043	-58.6	6.3	-81.0	41.4	7.48973	0.938	-85.1	67.1	47.9	20.9	18.9	15.27588	3-4
5	-10.438	-20.518	164.23328	-65.1	7.8	-80.7	40.2	7.72795	0.905	-84.6	67.6	42.5	26.2	24.9	16.30207	4-5
6	-10.973	-20.437	168.46020	-54.8	8.2	-82.7	41.5	7.96841	0.876	-90.1	67.8	42.2	29.3	24.6	16.39948	5-6
7	-11.544	-20.347	174.73898	-46.6	8.7	-84.7	42.9	8.22956	0.845	-95.6	67.9	42.5	33.1	23.1	17.50875	6-7
8	-11.538	-20.936	168.10998	-38.9	7.0	-84.6	44.1	7.95000	0.878	-95.1	67.3	47.9	29.0	17.2	17.46863	7-8
9	-11.533	-21.485	163.52152	-25.0	5.4	-84.6	45.3	7.69541	0.910	-94.7	66.8	53.3	25.7	11.4	16.28931	8-9
10	-10.998	-21.533	158.02194	-36.7	5.1	-82.9	44.0	7.47470	0.940	-90.1	66.7	53.1	20.6	12.6	16.27857	9-10
11	-10.494	-21.577	154.36218	-48.5	4.8	-81.2	42.6	7.26989	0.969	-85.5	66.6	53.3	16.2	13.0	15.32174	10-11
12	-10.114	-22.083	150.29640	-48.3	3.2	-80.0	42.8	6.76100	0.978	-82.1	66.1	58.9	8.6	7.1	18.95555	11-12
13	-10.078	-21.613	152.54288	-64.0	4.6	-79.7	41.5	7.10285	0.993	-81.5	66.5	53.7	13.3	12.7	14.05842	12-13
14	-10.039	-21.114	156.39713	-71.5	6.0	-79.4	40.3	7.30961	0.962	-80.8	67.0	48.4	18.8	18.5	14.90962	13-14
15	-9.997	-20.583	162.04923	-75.7	7.4	-79.1	39.0	7.53309	0.929	-79.9	67.5	43.2	24.4	24.4	15.88446	14-15
16	-9.952	-20.015	169.69179	-78.3	8.8	-78.8	37.8	7.77629	0.894	-78.9	68.1	38.0	30.1	30.1	17.01196	15-16
17	-10.406	-19.932	172.18828	-69.4	9.2	-80.5	38.9	7.98797	0.870	-84.0	68.2	37.2	31.6	30.8	13.98955	16-17
18	-10.960	-19.828	176.85505	-60.3	9.7	-82.6	40.3	8.25021	0.841	-90.1	68.4	36.9	34.3	30.5	17.05721	17-18
19	-11.552	-19.712	183.68149	-52.6	10.4	-84.7	41.6	8.53639	0.809	-96.1	68.5	37.2	37.7	28.9	18.26859	18-19
20	-12.190	-19.582	192.93199	-46.2	11.1	-87.0	43.0	8.85144	0.775	-102.0	68.7	38.2	41.5	26.0	19.69836	19-20
21	-12.158	-20.247	183.30313	-40.2	9.3	-86.7	44.2	8.51550	0.812	-100.9	68.1	43.3	37.5	20.5	19.71094	20-21
22	-12.129	-20.861	176.12401	-32.7	7.5	-86.5	45.5	8.21186	0.845	-100.0	67.5	48.6	33.9	14.9	18.19357	21-22
23	-12.105	-21.432	171.11017	-23.9	5.7	-86.4	46.7	7.93494	0.877	-99.2	66.9	53.8	31.0	9.3	16.91198	22-23
24	-12.083	-21.965	168.00040	-13.6	3.9	-86.2	47.9	7.68061	0.906	-98.6	66.4	59.0	29.0	3.8	15.81504	23-24
25	-11.529	-21.999	160.79489	-16.9	3.7	-84.6	46.5	7.45976	0.939	-94.3	66.3	58.6	23.3	5.6	16.80686	24-25
26	-11.010	-22.030	155.53078	-22.1	3.5	-82.9	45.2	7.25570	0.970	-90.1	66.2	58.4	17.7	6.7	15.77228	25-26
27	-10.519	-22.059	152.03536	-31.7	3.4	-81.3	43.9	7.06575	0.998	-85.8	66.1	58.5	12.4	7.2	14.87376	26-27
28	-10.114	-22.083	150.29640	-48.3	3.2	-80.0	42.8	6.76100	0.978	-82.1	66.1	58.9	8.6	7.1	12.29641	27-28

TAB NO 188

ATLAS PHOTO NO 188

POD SEQUENCE NO 382

JULY 31, 1964 13 HR 24 MIN 49 SEC 982 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				58.817		136.96480	-9.766	-22.477	1872.420	2.535	-65.386	115.096				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.647	-20.552	151.92366	-37.7	6.2	-84.2	44.0	7.17338	0.899	-93.6	67.6	42.9	26.7	24.2	0.	0-1
2	-10.959	-20.967	149.50627	-47.3	6.7	-82.8	42.7	7.10518	0.909	-90.1	67.3	47.6	24.6	18.6	15.57094	1-2
3	-10.506	-21.496	142.21387	-48.6	4.9	-81.2	42.6	6.69775	0.969	-85.5	66.7	53.3	16.2	13.1	20.88203	2-3
4	-10.481	-21.024	145.91302	-58.6	6.3	-81.0	41.4	6.90101	0.938	-85.1	67.1	47.9	21.0	19.0	14.07845	3-4
5	-10.454	-20.521	151.32965	-65.0	7.8	-80.7	40.2	7.12077	0.905	-84.6	67.6	42.5	26.2	24.9	15.02288	4-5
6	-10.948	-20.445	155.22513	-54.8	8.2	-82.7	41.5	7.34237	0.876	-90.1	67.8	42.2	29.3	24.6	15.11118	5-6
7	-11.474	-20.363	160.99655	-46.7	8.7	-84.7	42.8	7.58235	0.846	-95.6	67.9	42.5	33.1	23.1	16.12748	6-7
8	-11.468	-20.905	154.88655	-39.0	7.0	-84.7	44.0	7.32539	0.879	-95.1	67.4	47.9	29.0	17.3	16.09559	7-8
9	-11.464	-21.411	150.66253	-29.3	5.4	-84.7	45.1	7.08938	0.910	-94.7	66.9	53.3	25.6	11.5	15.01151	8-9
10	-10.971	-21.455	145.58729	-36.9	5.1	-82.9	43.8	6.88652	0.940	-90.1	66.8	53.1	20.6	12.7	14.99362	9-10
11	-10.506	-21.496	142.21387	-48.6	4.9	-81.2	42.6	6.69775	0.969	-85.5	66.7	53.3	16.2	13.1	14.11641	10-11
12	-10.157	-21.962	138.43713	-48.5	3.3	-80.0	42.7	6.22957	0.979	-82.1	66.2	58.9	8.7	7.2	17.46852	11-12
13	-10.123	-21.529	140.52883	-63.9	4.7	-79.7	41.5	6.54342	0.992	-81.5	66.6	53.7	13.4	12.8	12.95374	12-13
14	-10.087	-21.070	144.09452	-71.3	6.1	-79.4	40.3	6.73459	0.962	-80.8	67.1	48.4	18.8	18.6	13.73990	13-14
15	-10.048	-20.581	149.30745	-75.5	7.4	-79.1	39.1	6.94074	0.929	-79.9	67.5	43.2	24.4	24.4	14.63711	14-15
16	-10.007	-20.057	156.34174	-78.2	8.8	-78.7	37.9	7.16449	0.895	-78.9	68.1	38.0	30.1	30.0	15.67072	15-16
17	-10.426	-19.980	158.65129	-69.4	9.2	-80.5	39.0	7.35998	0.871	-84.0	68.2	37.2	31.6	30.8	12.89095	16-17
18	-10.936	-19.884	162.94961	-60.3	9.7	-82.6	40.3	7.60154	0.842	-90.1	68.3	36.9	34.2	30.5	15.71579	17-18
19	-11.481	-19.778	169.22044	-52.7	10.3	-84.7	41.6	7.86434	0.810	-96.1	68.5	37.2	37.6	28.8	16.82430	18-19
20	-12.069	-19.660	177.70012	-46.3	11.0	-87.0	42.9	8.15262	0.777	-102.0	68.6	38.2	41.4	25.9	18.12587	19-20
21	-12.039	-20.271	168.85327	-40.3	9.2	-86.8	44.1	7.84420	0.813	-100.9	68.0	43.3	37.4	20.5	18.14501	20-21
22	-12.013	-20.837	162.24164	-32.9	7.5	-86.6	45.3	7.56457	0.846	-100.0	67.5	48.6	33.8	15.0	16.75881	21-22
23	-11.990	-21.362	157.60970	-24.1	5.7	-86.5	46.4	7.30885	0.877	-99.2	67.0	53.8	30.9	9.4	15.58229	22-23
24	-11.970	-21.853	154.72060	-13.9	3.9	-86.3	47.5	7.07328	0.907	-98.5	66.5	59.0	28.9	4.0	14.57100	23-24
25	-11.460	-21.885	148.10747	-17.2	3.7	-84.6	46.3	6.87115	0.939	-94.3	66.4	58.6	23.3	5.7	15.46957	24-25
26	-10.982	-21.914	143.26804	-22.5	3.5	-83.0	45.0	6.68364	0.969	-90.1	66.3	58.4	17.7	6.9	14.52507	25-26
27	-10.530	-21.941	140.04700	-32.1	3.4	-81.4	43.7	6.50860	0.998	-85.8	66.3	58.5	12.5	7.3	13.70126	26-27
28	-10.157	-21.962	138.43713	-48.5	3.3	-80.0	42.7	6.22957	0.979	-82.1	66.2	58.9	8.7	7.2	11.32753	27-28

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JULY 31, 1964 13 HR 24 MIN 55 SEC 102 MS TAB NO 189 ATLAS PHOTO NO 189 POD SEQUENCE NO 384

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				53.697			125.15578	-9.837	-22.324	1860.611	2.541	-65.286	115.068			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.644	-20.558	138.84443	-37.8	6.2	-84.2	43.9	6.55919	0.899	-93.5	67.6	43.0	26.6	24.2	0.	0- 1
2	-10.933	-20.932	136.71422	-47.4	6.7	-82.8	42.6	6.49725	0.909	-90.1	67.3	47.6	24.6	18.6	14.15886	1- 2
3	-10.519	-21.416	130.03065	-48.7	4.9	-81.2	42.5	6.12397	0.968	-85.5	66.8	53.3	16.3	13.2	19.09961	2- 3
4	-10.496	-20.984	133.42709	-58.6	6.3	-81.0	41.4	6.31048	0.938	-85.1	67.2	47.9	21.0	19.0	12.87674	3- 4
5	-10.471	-20.523	138.38502	-65.0	7.8	-80.7	40.3	6.51165	0.905	-84.6	67.6	42.5	26.2	24.9	13.73928	4- 5
6	-10.922	-20.455	141.94777	-54.9	8.2	-82.7	41.5	6.71434	0.877	-90.1	67.7	42.2	29.2	24.5	13.81865	5- 6
7	-11.403	-20.379	147.21255	-46.8	8.7	-84.7	42.7	6.93317	0.846	-95.1	67.4	47.9	29.0	23.1	14.74821	6- 7
8	-11.398	-20.875	141.62367	-39.2	7.0	-84.7	43.8	6.69811	0.879	-95.1	67.4	47.9	29.0	17.3	14.71819	7- 8
9	-11.394	-21.337	137.74781	-29.5	5.4	-84.7	44.9	6.48168	0.910	-94.7	66.9	53.3	25.6	11.5	13.72926	8- 9
10	-10.943	-21.378	133.11655	-37.1	5.1	-82.9	43.7	6.29663	0.940	-90.1	66.8	53.1	20.7	12.7	12.90746	9-10
11	-10.519	-21.416	130.03065	-48.7	4.9	-81.2	42.5	6.12397	0.968	-85.5	66.8	53.3	16.3	13.2	15.97643	10-11
12	-10.199	-21.842	126.54925	-48.7	3.3	-80.0	42.6	5.69653	0.979	-82.1	66.3	58.9	8.8	7.3	11.84563	11-12
13	-10.168	-21.446	128.48185	-63.9	4.7	-79.7	41.4	5.98247	0.992	-81.5	66.7	53.7	13.5	12.9	11.84563	12-13
14	-10.135	-21.026	131.75551	-71.2	6.1	-79.4	40.3	6.15788	0.961	-80.8	67.1	48.4	18.9	18.6	12.56618	13-14
15	-10.100	-20.578	136.52692	-75.4	7.5	-79.1	39.2	6.34659	0.929	-79.9	67.5	43.2	24.4	24.4	13.38565	14-15
16	-10.062	-20.100	142.95223	-78.1	8.8	-78.7	38.1	6.55088	0.895	-78.9	68.0	38.0	30.0	30.0	14.32598	15-16
17	-10.445	-20.029	145.07254	-69.3	9.2	-80.5	39.1	6.73005	0.871	-84.0	68.1	37.2	31.6	30.7	11.78874	16-17
18	-10.911	-19.942	149.00141	-60.3	9.7	-82.6	40.4	6.95088	0.842	-90.1	68.2	36.9	34.2	30.4	14.37020	17-18
19	-11.410	-19.845	154.71810	-52.7	10.3	-84.7	41.6	7.19037	0.811	-96.1	68.4	37.2	37.5	28.8	15.57696	18-19
20	-11.946	-19.737	162.43207	-46.4	10.9	-86.9	42.8	7.45214	0.778	-102.0	68.5	38.2	41.3	25.8	16.55271	19-20
21	-11.919	-20.220	154.74640	-40.4	9.2	-86.8	43.9	7.17114	0.814	-100.9	68.0	43.3	37.3	20.5	16.57701	20-21
22	-11.895	-20.812	148.32262	-33.0	7.4	-86.0	43.0	6.71554	0.847	-100.0	67.5	48.6	33.7	15.0	15.52031	21-22
23	-11.875	-21.293	144.07605	-24.3	5.7	-86.5	46.1	6.68123	0.878	-99.2	67.0	53.8	30.7	7.5	12.91482	22-23
24	-11.856	-21.742	141.41258	-14.2	3.9	-86.4	47.2	6.46886	0.907	-98.5	66.6	59.0	28.8	4.1	13.32327	23-24
25	-11.391	-21.771	135.38923	-17.5	3.7	-84.7	46.0	6.28110	0.939	-94.3	66.5	58.6	23.3	5.9	14.13088	24-25
26	-10.953	-21.797	130.97395	-22.9	3.6	-83.0	44.7	6.11011	0.969	-90.1	66.4	58.4	17.8	7.0	13.73530	25-26
27	-10.540	-21.822	128.02828	-32.5	3.4	-81.4	43.5	5.95005	0.998	-85.8	66.4	58.5	12.6	7.4	12.52579	26-27
28	-10.199	-21.842	126.54925	-48.7	3.3	-80.0	42.6	5.69653	0.979	-82.1	66.3	58.9	8.8	7.3	10.35610	27-28

JULY 31, 1964 13 HR 25 MIN 0 SEC 222 MS TAB NO 190 ATLAS PHOTO NO 190 POD SEQUENCE NO 386

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LON		R		V		PTH		AZ		
				48.577			113.32565		-9.908		-22.169		1848.781		2.548		-65.185		115.040		
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.642	-20.563	125.73826	-38.0	6.2	-84.2	43.7	5.94315	0.899	-93.5	67.6	43.0	26.6	24.1	0.	0- 1					
2	-10.906	-20.897	123.88206	-47.5	6.7	-82.8	42.5	5.88741	0.909	-90.1	67.3	47.6	24.6	18.7	12.75730	1- 2					
3	-10.531	-21.335	117.81211	-48.8	4.9	-81.2	42.4	5.54852	0.968	-85.4	66.9	53.3	16.4	13.2	17.31078	2- 3					
4	-10.510	-20.944	120.90232	-58.6	6.4	-81.0	41.4	5.71811	0.937	-85.1	67.2	47.9	21.1	19.1	11.67074	3- 4					
5	-10.487	-20.527	125.39924	-64.9	7.8	-80.7	40.3	5.90061	0.905	-84.6	67.6	42.5	26.2	24.9	12.45134	4- 5					
6	-10.896	-20.464	128.62804	-54.9	8.2	-82.7	41.4	6.08430	0.877	-90.1	67.7	42.2	29.2	24.5	12.52200	5- 6					
7	-11.332	-20.396	133.38693	-46.8	8.6	-84.7	42.6	6.28203	0.847	-95.1	67.8	42.5	33.0	23.1	13.35477	6- 7					
8	-11.327	-20.845	128.32108	-39.3	7.0	-84.7	43.6	6.06895	0.879	-95.1	67.4	47.9	29.0	17.3	13.33653	7- 8					
9	-11.324	-21.264	124.79693	-29.7	5.4	-84.8	44.7	5.87227	0.910	-94.7	67.0	53.3	25.6	11.6	12.44260	8- 9					
10	-10.915	-21.301	120.60931	-37.3	5.1	-83.0	43.5	5.70502	0.940	-90.1	66.9	53.1	20.7	12.8	12.91482	9-10					
11	-10.531	-21.335	117.81211	-48.8	4.9	-81.2	42.4	5.54852	0.968	-85.4	66.9	53.3	16.4	13.2	11.69491	10-11					
12	-10.241	-21.722	114.63223	-48.9	3.3	-79.9	42.5	5.16185	0.979	-82.1	66.4	58.9	8.9	7.4	14.47928	11-12					
13	-10.213	-21.363	116.40151	-63.8	4.7	-79.7	41.4	5.41996	0.992	-81.5	66.8	53.7	13.6	13.0	10.73403	12-13					
14	-10.183	-20.982	119.37982	-71.1	6.1	-79.4	40.4	5.57945	0.961	-80.8	67.2	48.4	18.9	18.7	11.38848	13-14					
15	-10.151	-20.577	123.70750	-75.2	7.5	-79.0	39.3	5.75064	0.929	-79.9	67.6	43.2	24.4	24.4	12.13010	14-15					
16	-10.116	-20.143	129.52330	-77.9	8.9	-78.6	38.3	5.93547	0.895	-78.9	68.0	38.0	30.0	30.0	12.97778	15-16					
17	-10.464	-20.079	131.45215	-69.2	9.2	-80.4	39.3	6.09819	0.871	-84.0	68.1	37.2	31.5	30.7	10.68303	16-17					
18	-10.886	-20.000	135.01066	-60.3	9.7	-82.6	40.4	6.29823	0.843	-90.1	68.2	36.9	34.1	30.3	13.02056	17-18					
19	-11.338	-19.912	140.17472	-52.7	10.2	-84.7	41.5	6.51449	0.812	-96.1	68.3	37.2	37.4	28.7	13.92657	18-19					
20	-11.823	-19.816	147.12820	-46.4	10.8	-86.9	42.7	6.75002	0.780	-102.0	68.5	38.2	41.1	25.8	14.97890	19-20					
21	-11.799	-20.321	139.83964	-40.5	9.1	-86.8	43.8	6.49632	0.815	-100.9	68.0	43.3	37.2	20.5	15.00711	20-21					
22	-11.778	-20.789	134.36685	-33.2	7.4	-86.7	44.8	6.26485	0.857	-100.0	67.5	48.6	33.7	15.1	13.87819	21-22					
23	-11.759	-21.224	130.50889	-24.5	5.7	-86.6	45.8	6.05205	0.879	-99.2	67.1	53.8	30.8	9.6	12.91060	22-23					
24	-11.742	-21.630	128.07584	-14.4	3.9	-86.5	46.8	5.85513	0.908	-98.5	66.7	59.0	28.7	4.2	12.07183	23-24					
25	-11.321	-21.657	122.63961	-17.9	3.8	-84.8	45.7	5.68961	0.939	-94.3	66.6	58.6	23.2	6.0	12.79098	24-25					
26	-10.924	-21.681	118.64800	-23.3	3.6	-83.1	44.5	5.53509	0.969	-90.1	66.6	58.4	17.8	7.1	12.02289	25-26					
27	-10.550	-21.704	115.97865	-32.9	3.5	-81.4	43.4	5.39006	0.997	-85.8	66.5	58.5	12.7	7.5	11.34704	26-27					
28	-10.241	-21.722	114.63223	-48.9	3.3	-79.9	42.5	5.16185	0.979	-82.1	66.4	58.9	8.9	7.4	9.38222	27-28					

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JULY 31, 1964 13 HR 25 MIN 5 SEC 342 MS TAB NO 191 ATLAS PHOTO NO 191 POD SEQUENCE NO 388

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				43.457		101.47412	-9.980	-22.012	1836.929	2.555	-65.082	115.011				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.639	-20.568	112.60466	-38.2	6.2	-84.3	43.5	5.32524	0.899	-93.5	67.6	43.1	26.5	24.0	0.	0-1
2	-10.879	-20.862	111.00950	-47.6	6.7	-82.9	42.4	5.27565	0.909	-90.1	67.3	47.6	24.7	18.7	11.36508	1-2
3	-10.542	-21.255	105.55778	-48.9	4.9	-81.2	42.3	4.97138	0.968	-85.4	66.9	53.2	16.5	13.3	15.51562	2-3
4	-10.524	-20.904	108.33841	-58.6	6.4	-81.0	41.3	5.12389	0.937	-85.1	67.3	47.9	21.1	19.1	10.46047	3-4
5	-10.504	-20.530	112.37220	-64.9	7.8	-80.7	40.4	5.28762	0.905	-84.6	67.6	42.5	26.2	24.9	11.15911	4-5
6	-10.870	-20.474	115.26588	-54.9	8.2	-82.7	41.4	5.45225	0.877	-90.1	67.7	42.2	29.2	24.5	11.22133	5-6
7	-11.260	-20.413	119.51966	-46.9	8.6	-84.7	42.5	5.62893	0.847	-95.5	67.8	42.5	32.9	23.1	11.96310	6-7
8	-11.256	-20.816	114.97857	-39.4	7.0	-84.8	43.5	5.43791	0.879	-95.1	67.4	47.9	25.9	17.4	11.45066	7-8
9	-11.253	-21.191	111.80956	-29.9	5.4	-84.8	44.4	5.26115	0.910	-94.7	67.1	53.3	25.6	11.7	11.15153	8-9
10	-10.897	-21.224	108.06513	-37.5	5.2	-83.0	43.4	5.11166	0.940	-90.1	67.0	53.1	20.7	12.9	11.12067	9-10
11	-10.542	-21.255	105.55778	-48.9	4.9	-81.2	42.3	4.97138	0.968	-85.4	66.9	53.2	16.5	13.3	10.47884	10-11
12	-10.283	-21.602	102.68547	-49.1	3.4	-79.9	42.4	4.62551	0.980	-82.1	66.6	58.9	9.1	7.6	12.97690	11-12
13	-10.258	-21.280	104.28736	-63.7	4.8	-79.6	41.4	4.85588	0.991	-81.5	66.9	53.7	13.7	13.1	9.61892	12-13
14	-10.231	-20.939	106.96710	-70.9	6.2	-79.3	40.4	4.99930	0.961	-80.8	67.2	48.4	19.0	18.7	10.20675	13-14
15	-10.202	-20.575	110.84906	-75.1	7.5	-79.0	39.4	5.15289	0.929	-79.9	67.6	43.2	24.5	24.4	10.87055	14-15
16	-10.171	-20.187	116.05502	-77.8	8.9	-78.6	38.5	5.31827	0.895	-78.9	67.9	38.0	29.9	29.9	11.62624	15-16
17	-10.682	-20.129	117.79020	-69.1	9.2	-80.4	39.4	5.46441	0.872	-84.0	68.0	37.2	31.5	30.6	9.57364	16-17
18	-10.841	-20.058	120.97749	-60.3	9.7	-82.5	40.4	5.64360	0.843	-90.1	68.1	36.9	34.1	30.3	11.66687	17-18
19	-11.266	-19.980	125.59054	-52.8	10.2	-84.7	41.5	5.83672	0.813	-96.1	68.2	37.2	37.3	28.7	12.47317	18-19
20	-11.700	-19.494	131.78882	-46.5	10.7	-86.9	42.6	6.04627	0.782	-102.0	68.4	38.2	41.0	25.7	13.40437	19-20
21	-11.678	-20.347	125.27607	-40.6	9.1	-86.8	43.6	5.81975	0.816	-100.9	67.9	43.3	37.1	20.5	13.43542	20-21
22	-11.659	-20.765	120.37417	-33.4	7.4	-86.7	44.6	5.61242	0.848	-100.0	67.5	48.6	33.6	15.1	12.43253	21-22
23	-11.642	-21.155	116.90791	-24.7	5.7	-86.7	45.5	5.42132	0.879	-99.2	67.1	53.8	30.7	9.7	11.56867	22-23
24	-11.627	-21.519	114.70982	-14.7	4.0	-86.6	46.4	5.24407	0.909	-98.5	66.8	59.0	28.7	4.4	10.81667	23-24
25	-11.250	-21.543	109.85808	-18.2	3.8	-84.8	45.4	5.09663	0.939	-94.3	66.7	58.6	23.2	6.1	11.44948	24-25
26	-10.895	-21.565	106.28959	-23.6	3.6	-83.1	44.3	4.95857	0.969	-90.1	66.7	58.4	17.8	7.2	10.76781	25-26
27	-10.560	-21.585	103.89753	-33.2	3.5	-81.4	43.2	4.82860	0.997	-85.8	66.6	58.5	12.8	7.7	10.16533	26-27
28	-10.283	-21.602	102.68547	-49.1	3.4	-79.9	42.4	4.62551	0.980	-82.1	66.6	58.9	9.1	7.6	8.40550	27-28

JULY 31, 1964 13 HR 25 MIN 10 SEC 462 MS TAB NO 192 ATLAS PHOTO NO 192 POD SEQUENCE NO 390

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				38.338			89.60120	-10.053	-21.853	1825.056	2.561	-64.979	114.981			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.637	-20.572	99.44372	-38.3	6.2	-84.3	43.3	4.70540	0.899	-93.5	67.6	43.2	26.4	24.0	0.	0-1
2	-10.851	-20.828	98.09504	-47.7	6.7	-82.9	42.3	4.66190	0.909	-90.1	67.4	47.6	24.7	18.7	9.98495	1-2
3	-10.554	-21.175	93.26664	-49.1	5.0	-81.2	42.2	4.39252	0.967	-85.4	67.0	53.2	16.5	13.4	13.71367	2-3
4	-10.537	-20.865	95.73389	-58.6	6.4	-81.0	41.3	4.52775	0.937	-85.0	67.3	47.9	21.2	19.1	9.24568	3-4
5	-10.519	-20.535	99.30198	-64.8	7.8	-80.7	40.4	4.67260	0.905	-84.6	67.6	42.5	26.2	24.9	9.86228	4-5
6	-10.843	-20.485	101.85925	-55.0	8.2	-82.7	41.4	4.81810	0.877	-90.1	67.7	42.2	29.2	24.5	9.91622	5-6
7	-11.188	-20.431	105.60867	-47.0	8.6	-84.8	42.4	4.97378	0.848	-95.5	67.8	42.5	32.9	23.1	10.56775	6-7
8	-11.184	-20.787	101.59458	-39.6	7.0	-84.8	43.3	4.80491	0.879	-95.1	67.5	47.9	28.9	17.4	10.56024	7-8
9	-11.181	-21.119	98.78452	-30.1	5.4	-84.9	44.2	4.64826	0.910	-94.7	67.1	53.3	25.6	11.8	9.85580	8-9
10	-10.858	-21.148	95.48294	-37.7	5.2	-83.0	43.2	4.51651	0.939	-90.1	67.1	53.1	20.8	13.0	9.82324	9-10
11	-10.554	-21.175	93.26664	-49.1	5.0	-81.2	42.2	4.39252	0.967	-85.4	67.0	53.2	16.5	13.4	9.25885	10-11
12	-10.325	-21.482	90.70834	-49.3	3.4	-79.9	42.3	4.08743	0.980	-82.1	66.7	58.9	9.2	7.7	11.46923	11-12
13	-10.302	-21.198	92.13839	-63.6	4.8	-79.6	41.3	4.29018	0.991	-81.5	67.0	53.7	13.8	13.2	8.50016	12-13
14	-10.279	-20.896	94.51598	-70.8	6.2	-79.3	40.5	4.41735	0.960	-80.7	67.3	48.4	19.0	18.8	9.02079	13-14
15	-10.253	-20.575	97.94971	-75.0	7.6	-79.0	39.6	4.55323	0.929	-79.9	67.6	43.2	24.5	24.4	9.60666	14-15
16	-10.226	-20.231	102.54504	-77.7	8.9	-78.6	38.6	4.69915	0.896	-78.9	67.9	38.0	29.9	29.9	10.27094	15-16
17	-10.500	-20.180	104.08426	-69.1	9.2	-80.4	39.5	4.82858	0.872	-84.0	68.0	37.2	31.5	30.6	8.46053	16-17
18	-10.835	-20.118	106.89936	-60.3	9.7	-82.5	40.5	4.98687	0.844	-90.1	68.1	36.9	34.0	30.2	10.30892	17-18
19	-11.193	-20.049	110.96289	-52.8	10.1	-84.7	41.5	5.15692	0.814	-96.1	68.2	37.2	37.2	28.6	11.01640	18-19
20	-11.576	-19.974	116.41115	-46.6	10.7	-86.9	42.5	5.34076	0.783	-102.0	68.3	38.2	40.9	25.6	11.82903	19-20
21	-11.557	-20.373	110.67250	-40.7	9.0	-86.9	43.4	5.14132	0.817	-100.9	67.9	43.3	37.0	20.5	11.86144	20-21
22	-11.540	-20.743	106.34294	-33.5	7.3	-86.8	44.3	4.95820	0.849	-100.0	67.5	48.6	33.5	15.2	10.98292	21-22
23	-11.525	-21.087	103.27190	-25.0	5.7	-86.7	45.2	4.78896	0.880	-99.2	67.2	53.8	30.7	9.8	10.22242	22-23
24	-11.512	-21.408	101.31389	-15.0	4.0	-86.7	46.1	4.63164	0.909	-98.5	66.9	59.0	28.6	4.5	9.55762	23-24
25	-11.179	-21.429	97.04399	-18.5	3.8	-84.9	45.1	4.50215	0.940	-94.3	66.8	58.5	23.2	6.3	10.10656	24-25
26	-10.866	-21.449	93.89809	-24.0	3.7	-83.1	44.1	4.38049	0.969	-90.0	66.8	58.4	17.9	7.4	9.50998	25-26
27	-10.570	-21.467	91.78428	-33.6	3.5	-81.4	43.1	4.26565	0.997	-85.8	66.7	58.5	12.8	7.8	8.98032	26-27
28	-10.325	-21.482	90.70834	-49.3	3.4	-79.9	42.3	4.08743	0.980	-82.1	66.7	58.9	9.2	7.7	7.42612	27-28

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TAB NO 193

ATLAS PHOTO NO 193

POD SEQUENCE NO 392

JULY 31, 1964 13 HR 25 MIN 15 SEC 582 MS

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				33.218	77.70686	-10.127	-21.691	1813.162	2.568	-64.874	114.951					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.636	-20.576	86.25533	-38.5	6.2	-84.3	43.2	4.08358	0.899	-93.5	67.6	43.2	26.3	23.9	0.	0-1
2	-10.823	-20.794	85.13778	-47.8	6.7	-82.9	42.2	4.04612	0.909	-90.1	67.4	47.6	24.7	18.8	8.61810	1-2
3	-10.565	-21.096	80.93794	-49.2	5.0	-81.2	42.1	3.81188	0.967	-85.4	67.1	53.2	16.6	13.5	11.90491	2-3
4	-10.551	-20.827	83.08788	-58.6	6.4	-80.9	41.3	3.92965	0.937	-85.0	67.4	47.9	21.2	19.2	8.02628	3-4
5	-10.535	-20.540	86.18751	-64.8	7.8	-80.7	40.5	4.05550	0.905	-84.6	67.6	42.5	26.2	24.9	8.56067	4-5
6	-10.816	-20.497	88.40713	-55.0	8.2	-82.7	41.4	4.18180	0.877	-90.1	67.7	42.2	29.2	24.5	8.60655	5-6
7	-11.115	-20.450	91.65298	-47.1	8.5	-84.8	42.3	4.31651	0.848	-95.5	67.8	42.5	32.8	23.1	9.16882	6-7
8	-11.112	-20.759	88.16822	-39.7	7.0	-84.8	43.1	4.16991	0.880	-95.1	67.5	47.9	28.9	17.5	9.16511	7-8
9	-11.110	-21.046	85.72118	-30.4	5.4	-84.9	44.0	4.03357	0.910	-94.7	67.2	53.2	25.6	11.9	8.55530	8-9
10	-10.822	-21.072	82.86202	-37.9	5.2	-83.0	43.0	3.91952	0.929	-90.0	67.1	53.0	20.8	13.1	8.22251	9-10
11	-10.565	-21.096	80.93794	-49.2	5.0	-81.2	42.1	3.81188	0.967	-85.4	67.1	53.2	16.6	13.5	8.03522	10-11
12	-10.366	-21.362	78.70022	-49.5	3.4	-79.9	42.3	3.54760	0.980	-82.1	66.8	58.9	9.3	7.8	9.95594	11-12
13	-10.347	-21.115	79.95385	-63.5	4.8	-79.6	41.3	3.72283	0.990	-81.5	67.0	53.7	13.9	13.3	7.37767	12-13
14	-10.326	-20.853	82.02553	-70.7	6.2	-79.3	40.5	3.83358	0.960	-80.7	67.3	48.4	19.1	18.8	7.83047	13-14
15	-10.304	-20.574	85.00841	-74.8	7.6	-78.9	39.7	3.95163	0.929	-79.9	67.6	43.2	24.5	24.4	8.33828	14-15
16	-10.280	-20.276	88.99214	-77.5	8.9	-78.5	38.8	4.07808	0.896	-78.8	67.9	38.0	29.9	29.9	8.91176	15-16
17	-10.519	-20.232	90.33311	-69.0	9.3	-80.4	39.6	4.19065	0.873	-84.0	67.9	37.2	31.4	30.5	7.34358	16-17
18	-10.809	-20.178	92.77508	-60.3	9.7	-82.5	40.5	4.32798	0.844	-90.1	68.0	36.9	33.9	30.2	8.94648	17-18
19	-11.119	-20.118	96.29054	-52.8	10.1	-84.7	41.5	4.47504	0.815	-96.1	68.1	37.2	37.1	28.5	9.55614	18-19
20	-11.452	-20.054	100.99396	-46.6	10.6	-86.9	42.4	4.63344	0.785	-102.0	68.2	38.2	40.8	25.6	10.25279	19-20
21	-11.425	-20.400	96.02790	-40.8	8.9	-86.9	43.2	4.46099	0.818	-100.9	67.9	43.3	36.9	20.5	10.28497	20-21
22	-11.421	-20.720	92.27238	-33.7	7.3	-84.8	44.1	4.30215	0.850	-100.0	67.5	48.6	33.4	15.2	9.52923	21-22
23	-11.408	-21.019	89.60027	-25.2	5.6	-86.8	44.9	4.15470	0.880	-99.7	67.2	53.8	30.6	9.9	8.87175	22-23
24	-11.396	-21.298	87.88753	-15.3	4.0	-86.8	45.7	4.01783	0.910	-98.5	67.0	59.0	28.5	4.7	8.20447	23-24
25	-11.107	-21.316	84.19675	-18.9	3.8	-85.0	44.8	3.90613	0.940	-94.3	66.9	58.5	23.2	6.4	7.76223	24-25
26	-10.835	-21.333	81.47289	-24.4	3.7	-83.2	43.9	3.80084	0.969	-90.0	66.9	58.4	17.9	7.5	8.24938	25-26
27	-10.579	-21.349	79.63827	-34.0	3.5	-81.4	42.9	3.70117	0.996	-85.8	66.8	58.5	12.9	7.9	7.79214	26-27
28	-10.366	-21.362	78.70022	-49.5	3.4	-79.9	42.3	3.54760	0.980	-82.1	66.8	58.9	9.3	7.8	6.44376	27-28

JULY 31, 1964 13 HR 25 MIN 20 SEC 702 MS

TAB NO 194

ATLAS PHOTO NO 194

POD SEQUENCE NO 394

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				28.098		65.79063	-10.202	-21.528	1801.246	2.575	-64.768	114.921				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUM	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.634	-20.579	73.03886	-38.6	6.2	-84.4	43.0	3.45976	0.899	-93.5	67.6	43.3	26.3	23.8	0.	0-1
2	-10.794	-20.761	72.13672	-47.9	6.7	-82.9	42.1	3.42825	0.909	-90.0	67.4	47.6	24.7	18.8	7.26443	1-2
3	-10.576	-21.017	68.57069	-49.3	5.0	-81.2	42.0	3.22943	0.967	-85.4	67.2	53.2	16.7	13.6	10.08911	2-3
4	-10.564	-20.789	70.39936	-58.6	6.4	-80.9	41.3	3.32954	0.936	-85.0	67.4	47.9	21.3	19.2	6.80213	3-4
5	-10.551	-20.545	73.02775	-64.7	7.9	-80.7	40.5	3.43628	0.905	-84.6	67.6	42.5	26.2	24.9	7.25422	4-5
6	-10.789	-20.509	74.90846	-55.0	8.2	-82.7	41.4	3.54329	0.877	-90.1	67.7	42.2	29.2	24.5	7.29242	5-6
7	-11.042	-20.470	77.65149	-47.1	8.5	-84.8	42.2	3.65710	0.849	-95.5	67.7	42.5	32.8	23.0	7.76610	6-7
8	-11.039	-20.731	74.69853	-39.8	7.0	-84.9	43.0	3.53286	0.880	-95.1	67.5	47.9	28.8	17.5	7.76518	7-8
9	-11.037	-20.975	72.61852	-30.6	5.4	-85.0	43.7	3.41702	0.910	-94.7	67.3	53.2	25.5	12.0	7.24993	8-9
10	-10.800	-20.996	70.20139	-38.1	5.2	-83.1	42.9	3.32065	0.939	-90.0	67.2	53.0	20.8	13.2	7.21830	9-10
11	-10.576	-21.017	68.57069	-49.3	5.0	-81.2	42.0	3.22943	0.967	-85.4	67.2	53.2	16.7	13.6	6.80767	10-11
12	-10.408	-21.242	66.66024	-49.7	3.5	-79.9	42.2	3.00594	0.981	-82.1	66.9	58.9	9.4	7.9	8.43711	11-12
13	-10.391	-21.033	67.73277	-63.5	4.9	-79.6	41.3	3.15378	0.990	-81.5	67.1	53.7	14.0	13.4	6.25129	12-13
14	-10.373	-20.811	69.49475	-70.5	6.2	-79.3	40.5	3.24792	0.960	-80.7	67.4	48.4	19.2	18.9	6.63573	13-14
15	-10.355	-20.575	72.02415	-74.7	7.6	-78.9	39.8	3.34805	0.928	-79.9	67.6	43.2	24.5	24.4	7.06536	14-15
16	-10.334	-20.322	75.39524	-77.4	9.0	-78.5	39.0	3.45499	0.896	-78.8	67.8	38.0	29.8	29.8	7.54855	15-16
17	-10.536	-20.285	76.53568	-68.9	9.3	-80.3	39.7	3.55058	0.873	-84.0	67.9	37.2	31.4	30.5	6.22240	16-17
18	-10.783	-20.239	78.60354	-60.3	9.6	-82.5	40.6	3.66688	0.845	-90.1	67.9	36.9	33.9	30.1	7.57973	17-18
19	-11.045	-20.189	81.57247	-52.9	10.0	-84.7	41.4	3.79103	0.816	-96.1	68.0	37.2	37.0	28.5	8.09260	18-19
20	-11.327	-20.134	85.53615	-46.7	10.5	-86.9	42.3	3.92426	0.786	-102.0	68.1	38.2	40.6	25.5	8.67520	19-20
21	-11.313	-20.427	81.34126	-40.9	8.9	-86.9	43.1	3.77871	0.819	-100.9	67.8	43.3	36.8	20.5	8.70588	20-21
22	-11.301	-20.699	78.16142	-33.8	7.3	-86.9	43.8	3.64422	0.850	-100.0	67.6	48.6	33.4	15.3	8.07134	21-22
23	-11.290	-20.951	75.89203	-25.4	5.6	-86.9	44.6	3.51927	0.881	-99.2	67.3	53.8	30.5	10.0	7.51655	22-23
24	-11.280	-21.188	74.42984	-15.6	4.0	-86.9	45.3	3.40260	0.911	-98.5	67.1	59.0	28.4	4.8	7.02742	23-24
25	-11.035	-21.203	71.31546	-19.2	3.8	-85.0	44.5	3.30853	0.940	-94.3	67.0	58.5	23.2	6.5	7.41628	24-25
26	-10.805	-21.218	69.01308	-24.8	3.7	-83.2	43.6	3.21957	0.968	-90.0	67.0	58.4	17.9	7.6	6.98601	25-26
27	-10.588	-21.231	67.45863	-34.4	3.6	-81.4	42.8	3.13513	0.996	-85.8	67.0	58.5	13.0	8.0	6.60056	26-27
28	-10.408	-21.242	66.66024	-49.7	3.5	-79.9	42.2	3.00594	0.981	-82.1	66.9	58.9	9.4	7.9	5.45865	27-28

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JULY 31, 1964 13 HR 25 MIN 25 SEC 822 MS

TAB NO 195

ATLAS PHOTO NO 195

POD SEQUENCE NO 396

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
PHOTO DATA				22.978		53.85239		-10.278		-21.362		1789.308		2.582		-64.660		114.890	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-10.633	-20.582	59.79420	-38.8	6.3	-84.4	42.8	2.83393	0.900	-93.5	67.6	43.4	26.2	23.8	0.	0-1			
2	-10.765	-20.728	59.09223	-48.0	6.7	-82.9	42.0	2.80832	0.908	-90.0	67.5	47.6	24.7	18.9	5.92080	1-2			
3	-10.587	-20.938	56.16498	-49.4	5.0	-81.2	41.9	2.64516	0.966	-85.4	67.2	53.2	16.8	13.7	8.26648	2-3			
4	-10.576	-20.751	57.66868	-58.6	6.5	-80.9	41.3	2.72744	0.936	-85.0	67.4	47.9	21.3	19.3	5.57334	3-4			
5	-10.566	-20.552	59.82344	-64.7	7.9	-80.6	40.6	2.81495	0.905	-84.6	67.6	42.5	26.2	24.9	5.94308	4-5			
6	-10.761	-20.522	61.36404	-55.0	8.2	-82.7	41.3	2.90262	0.877	-90.1	67.7	42.2	29.1	24.5	5.97386	5-6			
7	-10.968	-20.490	63.60510	-47.2	8.5	-84.8	42.1	2.99556	0.849	-95.5	67.7	42.5	32.7	23.0	6.35944	6-7			
8	-10.966	-20.704	61.18591	-40.0	6.9	-84.9	42.8	2.89378	0.880	-95.1	67.5	47.9	29.8	17.5	6.36066	7-8			
9	-10.964	-20.903	59.47665	-30.8	5.4	-85.0	43.5	2.79864	0.911	-94.7	67.3	53.2	25.5	12.0	5.93977	8-9			
10	-10.770	-20.921	57.50110	-38.3	5.2	-83.1	42.7	2.71990	0.939	-90.0	67.3	53.0	20.9	13.2	5.91082	9-10			
11	-10.587	-20.938	56.16498	-49.4	5.0	-81.2	41.9	2.64516	0.966	-85.4	67.2	53.2	16.8	13.7	5.57619	10-11			
12	-10.449	-21.123	54.58817	-49.9	3.5	-79.9	42.1	2.46246	0.981	-82.1	67.1	58.9	9.6	8.0	6.91270	11-12			
13	-10.435	-20.952	55.47519	-63.4	4.9	-79.6	41.3	2.58304	0.990	-81.5	67.2	53.7	14.1	13.4	5.12108	12-13			
14	-10.421	-20.770	56.92399	-70.4	6.3	-79.2	40.6	2.66040	0.959	-80.7	67.4	48.4	19.2	18.9	5.43664	13-14			
15	-10.405	-20.576	58.99759	-74.5	7.6	-78.9	39.9	2.74250	0.928	-79.9	67.6	43.2	24.5	24.4	5.78801	14-15			
16	-10.389	-20.369	61.75551	-77.3	9.0	-78.5	39.2	2.82994	0.897	-78.8	67.8	38.0	29.8	29.8	6.18160	15-16			
17	-10.554	-20.339	62.69315	-68.9	9.3	-80.3	39.9	2.90841	0.873	-84.0	67.8	37.2	31.3	30.4	5.09751	16-17			
18	-10.756	-20.301	64.38603	-60.2	9.6	-82.5	40.6	3.00364	0.846	-90.1	67.9	36.9	33.8	30.1	6.20855	17-18			
19	-10.971	-20.260	66.81008	-52.9	10.0	-84.7	41.4	3.10497	0.817	-96.1	67.9	37.2	36.9	28.4	6.62562	18-19			
20	-11.201	-20.216	70.03936	-46.7	10.4	-86.9	42.2	3.21329	0.788	-102.0	68.0	38.2	40.5	25.4	7.09675	19-20			
21	-11.190	-20.455	66.61360	-41.0	8.8	-86.9	42.9	3.09453	0.820	-100.9	67.8	43.3	36.7	20.5	7.12459	20-21			
22	-11.180	-20.677	64.01066	-34.0	7.2	-86.9	43.6	2.98444	0.851	-100.0	67.6	48.6	33.3	15.3	6.60954	21-22			
23	-11.171	-20.884	62.14732	-25.6	5.6	-86.9	44.3	2.88189	0.882	-99.2	67.4	53.8	30.5	10.1	6.15694	22-23			
24	-11.163	-21.078	60.94055	-15.9	4.0	-87.0	45.0	2.78592	0.911	-98.5	67.2	59.0	28.4	4.9	5.75623	23-24			
25	-10.963	-21.091	58.39990	-19.5	3.9	-85.1	44.2	2.70934	0.940	-94.3	67.1	58.5	23.1	6.6	6.06871	24-25			
26	-10.774	-21.103	56.51840	-25.1	3.7	-83.3	43.4	2.63668	0.968	-90.0	67.1	58.4	17.9	7.7	5.71968	25-26			
27	-10.596	-21.114	55.24510	-34.7	3.6	-81.5	42.6	2.65751	0.996	-85.8	67.1	58.5	13.1	8.1	5.40549	26-27			
28	-10.449	-21.123	54.58817	-49.9	3.5	-79.9	42.1	2.46246	0.981	-82.1	67.1	58.9	9.6	8.0	4.47076	27-28			

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TAB NO 196

ATLAS PHOTO NO 196

POD SEQUENCE NO 398

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
PHOTO DATA				17.858		41.89232		-10.355		-21.194		1777.348		2.589		-64.551		114.858	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-10.632	-20.584	46.52141	-38.9	6.3	-84.4	42.7	2.20612	0.900	-93.5	67.6	43.4	26.1	23.7	0.	0-1			
2	-10.736	-20.696	46.00446	-48.1	6.7	-82.9	41.9	2.18633	0.908	-90.0	67.5	47.6	24.7	18.9	4.58836	1-2			
3	-10.597	-20.859	43.72071	-49.5	5.1	-81.2	41.9	2.05908	0.966	-85.4	67.3	53.2	16.8	13.7	6.43707	2-3			
4	-10.589	-20.714	44.89573	-58.6	6.5	-80.9	41.2	2.12334	0.936	-85.0	67.5	47.9	21.3	19.3	4.33989	3-4			
5	-10.581	-20.559	46.57440	-64.6	7.9	-80.6	40.6	2.19153	0.905	-84.6	67.6	42.5	26.2	24.9	4.62722	4-5			
6	-10.732	-20.535	47.77397	-55.0	8.2	-82.7	41.3	2.25979	0.878	-90.0	67.7	42.2	29.1	24.5	4.65090	5-6			
7	-10.894	-20.511	49.51427	-47.3	8.4	-84.8	42.0	2.33194	0.850	-95.5	67.7	42.5	32.6	23.0	4.94924	6-7			
8	-10.892	-20.677	47.63084	-40.1	6.9	-84.9	42.7	2.25269	0.880	-95.1	67.5	47.9	28.8	17.6	4.95159	7-8			
9	-10.891	-20.832	46.29608	-31.0	5.4	-85.1	43.3	2.17843	0.911	-94.6	67.4	53.2	25.5	12.1	4.62490	8-9			
10	-10.740	-20.846	44.76134	-38.5	5.2	-83.1	42.6	2.11729	0.938	-90.0	67.4	53.0	20.9	13.3	4.60018	9-10			
11	-10.597	-20.859	43.72071	-49.5	5.1	-81.2	41.9	2.05908	0.966	-85.4	67.3	53.2	16.8	13.7	4.34079	10-11			
12	-10.490	-21.004	42.48388	-50.0	3.5	-79.9	42.0	1.91714	0.981	-82.1	67.2	58.9	9.7	8.2	5.38262	11-12			
13	-10.479	-20.870	43.18095	-63.3	4.9	-79.6	41.3	2.01059	0.989	-81.5	67.3	53.7	14.2	13.5	3.98702	12-13			
14	-10.468	-20.728	44.31297	-70.2	6.3	-79.2	40.6	2.07101	0.959	-80.7	67.4	48.4	19.3	19.0	4.23312	13-14			
15	-10.456	-20.578	45.92841	-74.4	7.7	-78.8	40.0	2.13497	0.928	-79.9	67.6	43.2	24.5	24.4	4.50622	14-15			
16	-10.443	-20.417	48.07252	-77.1	9.0	-78.4	39.4	2.20292	0.897	-78.8	67.7	38.0	29.8	29.7	4.81086	15-16			
17	-10.572	-20.393	48.80533	-68.8	9.3	-80.3	40.0	2.26414	0.874	-84.0	67.8	37.2	31.3	30.4	3.96876	16-17			
18	-10.729	-20.363	50.12265	-60.2	9.6	-82.5	40.7	2.33825	0.846	-90.1	67.8	36.9	33.8	30.0	4.83304	17-18			
19	-10.896	-20.332	52.00380	-52.9	10.0	-84.7	41.4	2.41686	0.818	-96.1	67.9	37.2	36.8	28.3	5.15535	18-19			
20	-11.075	-20.297	54.50441	-46.8	10.3	-86.9	42.1	2.50057	0.790	-102.0	67.9	38.2	40.3	25.4	5.51764	19-20			
21	-11.066	-20.484	51.84576	-41.1	8.8	-87.0	42.7	2.40848	0.821	-100.9	67.7	43.3	36.6	20.5	5.54115	20-21			
22	-11.059	-20.657	49.82089	-34.1	7.2	-87.0	43.4	2.32285	0.852	-100.0	67.6	48.6	33.2	15.4	5.14389	21-22			
23	-11.052	-20.818	48.36698	-25.8	5.6	-87.0	44.0	2.26286	0.882	-99.2	67.4	53.8	30.4	10.2	4.79301	22-23			
24	-11.045	-20.968	47.42059	-16.2	4.0	-87.0	44.6	2.16784	0.912	-98.5	67.3	59.0	28.3	5.1	4.48105	23-24			
25	-10.890	-20.978	45.45063	-19.8	3.9	-85.2	43.9	2.10858	0.940	-94.3	67.2	58.5	23.1	6.8	4.71966	24-25			
26	-10.743	-20.988	43.98920	-25.5	3.8	-83.3	43.2	2.05217	0.968	-90.0	67.2	58.4	18.0	7.8	4.45059	25-26			
27	-10.604	-20.996	42.99774	-35.1	3.6	-81.5	42.5	1.99832	0.995	-85.8	67.2	58.5	13.2	8.3	4.20734	26-27			
28	-10.490	-21.004	42.48388	-50.0	3.5	-79.9	42.0	1.91714	0.981	-82.1	67.2	58.9	9.7	8.2	3.47981	27-28			

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TAB NO 197

ATLAS PHOTO NO 197

POD SEQUENCE NO 400

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
PHOTO DATA				12.738	29.90979	-10.432	-21.023	1765.365	2.597	-64.441	114.826					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.631	-20.586	33.21978	-39.1	6.3	-84.5	42.5	1.57627	0.900	-93.5	67.6	43.5	26.0	23.6	0.	0-1
2	-10.706	-20.664	32.87210	-48.1	6.7	-82.9	41.9	1.56222	0.908	-90.0	67.5	47.6	24.7	18.9	3.26549	1-2
3	-10.607	-20.781	31.23674	-49.6	5.1	-81.2	41.8	1.47114	0.965	-85.4	67.4	53.2	16.9	13.8	4.60049	2-3
4	-10.601	-20.677	32.07934	-58.6	6.5	-80.9	41.2	1.51719	0.935	-85.0	67.5	47.9	21.4	19.3	3.10167	3-4
5	-10.595	-20.566	33.27952	-64.5	7.9	-80.6	40.7	1.56594	0.905	-84.6	67.6	42.5	26.2	24.9	3.30657	4-5
6	-10.704	-20.550	34.13699	-55.1	8.2	-82.7	41.3	1.61674	0.878	-90.0	67.6	42.2	29.1	24.5	3.32333	5-6
7	-10.819	-20.532	35.37756	-47.3	8.4	-84.8	41.9	1.66615	0.850	-95.5	67.7	42.5	32.6	23.0	3.53542	6-7
8	-10.818	-20.651	34.03187	-40.2	6.9	-85.0	42.5	1.60953	0.881	-95.1	67.6	47.9	28.8	17.6	3.53788	7-8
9	-10.817	-20.762	33.07531	-31.2	5.4	-85.1	43.1	1.55634	0.911	-94.6	67.4	53.2	25.5	12.2	3.30515	8-9
10	-10.709	-20.772	31.98082	-38.7	5.2	-83.2	42.4	1.51275	0.938	-90.0	67.4	53.0	20.9	13.4	3.28586	9-10
11	-10.607	-20.781	31.23674	-49.6	5.1	-81.2	41.8	1.47114	0.965	-85.4	67.4	53.2	16.9	13.8	3.10148	10-11
12	-10.530	-20.884	30.34629	-50.2	3.6	-79.9	42.0	1.36993	0.982	-82.1	67.3	58.9	9.8	8.3	3.84689	11-12
13	-10.523	-20.789	30.84891	-63.2	5.0	-79.6	41.2	1.43638	0.989	-81.5	67.4	53.7	14.3	13.6	2.84689	12-13
14	-10.515	-20.688	31.66063	-70.1	6.3	-79.2	40.7	1.47968	0.959	-80.7	67.5	48.4	19.3	19.0	3.02511	13-14
15	-10.506	-20.580	32.81558	-74.2	7.7	-78.8	40.1	1.52542	0.928	-79.9	67.6	43.2	24.5	24.4	3.21990	14-15
16	-10.497	-20.465	34.34535	-77.0	9.1	-78.4	39.6	1.57387	0.898	-78.8	67.7	38.0	29.7	29.7	3.43627	15-16
17	-10.589	-20.448	34.87117	-68.9	9.3	-80.3	40.1	1.61772	0.874	-84.0	67.7	37.2	31.2	30.3	2.83601	16-17
18	-10.701	-20.427	35.81221	-60.2	9.6	-82.5	40.8	1.67066	0.847	-90.1	67.8	36.9	33.7	29.9	3.45311	17-18
19	-10.820	-20.404	37.15230	-52.9	9.9	-84.7	41.4	1.72664	0.819	-96.1	67.8	37.2	36.7	28.3	3.68185	18-19
20	-10.948	-20.380	38.92975	-46.8	10.3	-86.9	42.0	1.78603	0.791	-102.0	67.8	38.2	40.2	25.3	3.93737	19-20
21	-10.942	-20.513	37.03612	-41.2	8.7	-87.0	42.6	1.72050	0.822	-100.9	67.7	43.3	36.5	20.4	3.95544	20-21
22	-10.937	-20.636	35.59050	-34.3	7.2	-87.0	43.1	1.65937	0.853	-100.0	67.6	48.6	33.1	15.4	3.47425	21-22
23	-10.932	-20.751	34.54939	-26.0	5.6	-87.1	43.7	1.60211	0.885	-77.2	67.5	53.8	20.3	10.3	3.47467	22-23
24	-10.927	-20.859	33.86831	-16.5	4.0	-87.1	44.3	1.54829	0.912	-98.5	67.4	59.0	28.2	5.2	3.20173	23-24
25	-10.816	-20.866	32.46615	-20.2	3.9	-85.2	43.6	1.50620	0.940	-94.3	67.3	58.5	23.1	6.9	3.36900	24-25
26	-10.711	-20.873	31.42409	-25.8	3.8	-83.4	43.0	1.46599	0.968	-90.0	67.3	58.4	18.0	7.9	3.17864	25-26
27	-10.612	-20.879	30.71535	-35.4	3.7	-81.5	42.4	1.42750	0.995	-85.8	67.3	58.5	13.3	8.4	3.00561	26-27
28	-10.530	-20.884	30.34629	-50.2	3.6	-79.9	42.0	1.36993	0.982	-82.1	67.3	58.9	9.8	8.3	2.95810	27-28

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TAB NO 198

ATLAS PHOTO NO 198

POD SEQUENCE NO 402

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				7.618		17.90477	-10.511	-20.850	1753.360	2.604	-64.330	114.793				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.630	-20.587	19.88920	-39.2	6.3	-84.5	42.4	0.94430	0.900	-93.5	67.6	43.6	26.0	23.6	0.	0-1
2	-10.676	-20.633	19.69409	-48.2	6.7	-83.0	41.8	0.93595	0.908	-90.0	67.6	47.6	24.7	19.0	1.94890	1-2
3	-10.616	-20.703	18.71223	-49.7	5.1	-81.2	41.7	0.88128	0.965	-85.4	67.5	53.2	17.0	13.9	2.75681	2-3
4	-10.613	-20.641	19.21883	-58.6	6.5	-80.9	41.2	0.90895	0.935	-85.0	67.5	47.9	21.4	19.4	1.85862	3-4
5	-10.609	-20.575	19.93826	-64.5	7.9	-80.6	40.7	0.93818	0.905	-84.6	67.6	42.5	26.2	24.9	1.98115	4-5
6	-10.674	-20.565	20.45215	-55.1	8.1	-82.7	41.3	0.96742	0.878	-90.0	67.6	42.2	29.1	24.5	1.99110	5-6
7	-10.744	-20.554	21.19361	-47.4	8.4	-84.9	41.9	0.99814	0.851	-95.5	67.6	42.5	32.5	23.0	2.11742	6-7
8	-10.743	-20.625	20.38747	-40.3	6.9	-85.0	42.4	0.96422	0.881	-95.0	67.6	47.9	28.7	17.6	2.11942	7-8
9	-10.742	-20.692	19.81272	-31.5	5.4	-85.2	42.9	0.93227	0.911	-94.6	67.5	53.2	25.5	12.3	1.98043	8-9
10	-10.678	-20.698	19.15829	-38.8	5.3	-83.2	42.3	0.90622	0.938	-90.0	67.5	53.0	21.0	13.5	1.96736	9-10
11	-10.616	-20.703	18.71223	-49.7	5.1	-81.2	41.7	0.88128	0.965	-85.4	67.5	53.2	17.0	13.9	1.85802	10-11
12	-10.571	-20.765	18.17474	-50.3	3.6	-79.9	41.9	0.82078	0.985	-82.1	67.4	58.9	9.9	8.4	2.30514	11-12
13	-10.566	-20.708	18.47861	-63.1	5.0	-79.5	41.2	0.86040	0.988	-81.5	67.5	53.7	14.4	13.7	1.70691	12-13
14	-10.561	-20.647	18.96660	-69.9	6.4	-79.2	40.7	0.88642	0.958	-80.7	67.5	48.4	19.4	19.1	1.81262	13-14
15	-10.556	-20.583	19.65892	-74.1	7.7	-78.8	40.3	0.91383	0.928	-79.9	67.6	43.2	24.5	24.4	1.92908	14-15
16	-10.550	-20.514	20.57401	-76.8	9.1	-78.4	39.8	0.94280	0.898	-78.8	67.7	38.0	29.7	29.7	2.05793	15-16
17	-10.606	-20.504	20.89034	-68.6	9.3	-80.3	40.3	0.96913	0.875	-84.0	67.7	37.2	31.2	30.3	1.69914	16-17
18	-10.673	-20.491	21.45397	-60.2	9.6	-82.5	40.8	1.00084	0.848	-90.1	67.7	36.9	33.6	29.5	2.06860	17-18
19	-10.744	-20.478	22.25435	-53.0	9.9	-84.7	41.4	1.03427	0.820	-96.1	67.7	37.2	36.7	28.2	2.20468	18-19
20	-10.821	-20.463	23.31367	-46.9	10.2	-86.9	41.9	1.06959	0.793	-102.0	67.7	38.2	40.1	25.2	2.35595	19-20
21	-10.817	-20.543	22.18284	-41.2	8.7	-87.0	42.4	1.03049	0.823	-100.9	67.7	43.3	36.4	20.4	2.36738	20-21
22	-10.814	-20.616	21.31751	-34.4	7.1	-87.1	42.9	0.99390	0.853	-100.0	67.6	48.6	33.1	15.4	2.20050	21-22
23	-10.811	-20.685	20.69244	-26.2	5.6	-87.2	43.4	0.95954	0.883	-99.2	67.5	53.8	30.3	10.4	2.05162	22-23
24	-10.808	-20.750	20.28150	-16.8	4.0	-87.2	43.9	0.92717	0.913	-98.5	67.5	59.0	28.2	5.3	1.91811	23-24
25	-10.742	-20.754	19.44475	-20.5	3.9	-85.3	43.4	0.90210	0.940	-94.3	67.4	58.5	23.1	7.0	2.01632	24-25
26	-10.679	-20.758	18.82176	-26.2	3.8	-83.4	42.8	0.87807	0.968	-90.0	67.4	58.4	18.1	8.1	1.90352	25-26
27	-10.620	-20.762	18.39698	-35.7	3.7	-81.5	42.2	0.85500	0.995	-85.8	67.4	58.5	13.4	8.5	1.80027	26-27
28	-10.571	-20.765	18.17474	-50.3	3.6	-79.9	41.9	0.82078	0.982	-82.1	67.4	58.9	9.9	8.4	1.48910	27-28

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JULY 31, 1964 13 HR 25 MIN 46 SEC 301 MS TAB NO 199 ATLAS PHOTO NO 199 POD SEQUENCE NO 404

TRAJECTORY DATA				SEC TO IMPACT 2.498				ALT		LAT		LON		R		V		PTH		AZ	
PHOTO DATA								5.87714		-10.591		-20.675		1741.332		2.611		-64.217		114.759	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.630	-20.588	6.52952	-39.4	6.3	-84.5	42.2	0.31019	0.900	-93.5	67.6	43.6	25.9	23.5	0.	0-1					
2	-10.645	-20.603	6.46967	-48.3	6.7	-83.0	41.7	0.30747	0.908	-90.0	67.6	47.6	24.8	19.0	0.63795	1-2					
3	-10.626	-20.626	6.14647	-49.8	5.1	-81.2	41.7	0.28948	0.965	-85.4	67.6	53.2	17.1	14.0	0.90589	2-3					
4	-10.625	-20.605	6.31347	-58.5	6.5	-80.9	41.2	0.29860	0.935	-85.0	67.6	47.9	21.5	19.4	0.61070	3-4					
5	-10.623	-20.583	6.54992	-64.4	7.9	-80.6	40.8	0.30820	0.905	-84.6	67.6	42.5	26.2	24.9	0.65086	4-5					
6	-10.645	-20.580	6.71878	-55.1	8.1	-82.7	41.3	0.31781	0.878	-90.0	67.6	42.2	29.0	24.4	0.65412	5-6					
7	-10.667	-20.577	6.96172	-47.5	8.4	-84.9	41.8	0.32787	0.851	-95.5	67.6	42.5	32.5	23.0	0.69335	6-7					
8	-10.667	-20.600	6.69696	-40.5	6.9	-85.0	42.2	0.31673	0.881	-95.0	67.6	47.9	28.7	17.7	0.69617	7-8					
9	-10.667	-20.622	6.50760	-31.7	5.4	-85.2	42.6	0.30621	0.911	-94.6	67.6	53.3	24.5	12.4	0.65068	8-9					
10	-10.646	-20.624	6.27307	-39.0	5.3	-85.2	42.2	0.29767	0.938	-90.0	67.6	53.1	21.0	13.5	0.64627	9-10					
11	-10.626	-20.626	6.14647	-49.8	5.1	-81.2	41.7	0.28948	0.965	-85.4	67.6	53.2	17.1	14.0	0.61033	10-11					
12	-10.611	-20.646	5.96861	-50.4	3.6	-79.9	41.9	0.26965	0.983	-82.1	67.5	58.9	10.1	8.5	0.75741	11-12					
13	-10.609	-20.627	6.06933	-63.0	5.0	-79.5	41.2	0.28260	0.988	-81.5	67.6	53.7	14.5	13.8	0.56076	12-13					
14	-10.607	-20.607	6.23017	-69.8	6.4	-79.2	40.8	0.29117	0.958	-80.7	67.6	48.4	19.4	19.1	0.59554	13-14					
15	-10.606	-20.586	6.45712	-73.9	7.8	-78.8	40.4	0.30018	0.928	-79.9	67.6	43.2	24.5	24.4	0.63373	14-15					
16	-10.604	-20.564	6.75786	-76.7	9.1	-78.3	40.0	0.30968	0.898	-78.8	67.6	38.0	29.6	29.6	0.67578	15-16					
17	-10.622	-20.560	6.86218	-68.5	9.3	-80.2	40.4	0.31835	0.875	-84.0	67.6	37.2	31.1	30.2	0.55824	16-17					
18	-10.644	-20.556	7.04725	-60.2	9.6	-82.4	40.9	0.32876	0.848	-90.0	67.6	36.9	33.6	29.8	0.67942	17-18					
19	-10.668	-20.552	7.30935	-53.0	9.8	-84.7	41.4	0.33970	0.821	-96.1	67.6	37.2	36.6	28.1	0.72393	18-19					
20	-10.693	-20.547	7.65545	-47.0	10.1	-86.9	41.8	0.35122	0.794	-102.0	67.6	38.2	39.9	25.1	0.77288	19-20					
21	-10.692	-20.573	7.28517	-41.3	8.6	-87.0	42.2	0.33843	0.824	-100.9	67.6	43.3	36.3	20.4	0.77690	20-21					
22	-10.691	-20.597	7.00118	-34.6	7.1	-87.1	42.7	0.32642	0.854	-100.0	67.6	48.6	33.0	15.5	0.72262	21-22					
23	-10.690	-20.620	6.79544	-26.5	5.6	-87.2	43.1	0.31511	0.884	-99.2	67.6	53.8	30.2	10.5	0.67392	22-23					
24	-10.689	-20.641	6.65955	-17.1	4.0	-87.3	43.6	0.30444	0.914	-98.5	67.6	59.0	28.1	5.5	0.63006	23-24					
25	-10.667	-20.642	6.38575	-20.8	3.9	-85.4	43.1	0.29625	0.941	-94.3	67.5	58.5	23.1	7.1	0.66182	24-25					
26	-10.646	-20.644	6.18156	-26.5	3.8	-83.4	42.6	0.28838	0.967	-90.0	67.5	58.4	18.1	8.2	0.62492	25-26					
27	-10.627	-20.645	6.04198	-36.1	3.7	-81.5	42.1	0.28080	0.994	-85.8	67.5	58.5	13.4	8.6	0.59133	26-27					
28	-10.611	-20.646	5.96861	-50.4	3.6	-79.9	41.9	0.26965	0.983	-82.1	67.5	58.9	10.1	8.5	0.48913	27-28					

TIME- AND CAMERA-DEPENDENT PARAMETERS

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 8 MIN 44 SEC 881 MS

TAB NO 1

ATLAS PHOTO NO 1

POD SEQUENCE NO 5

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LON		R		V		PTH		AZ	
				1023.918				2110.25528		-3.278		-35.799		3845.711		1.933		-74.796		117.038	
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-12.197	-17.343	2298.81119	-60.3	10.9	-85.6	28.7	39.79051	0.690	-92.4	70.8	38.2	35.5	31.7	0.	0-1					
2	-13.102	-9.617	2445.53491	-64.2	12.9	-85.3	25.8	39.93731	0.683	-90.8	78.4	33.9	46.9	43.7	229.96107	1-2					
3	-10.504	-13.784	2348.30533	-66.9	10.0	-83.3	23.9	38.30794	0.769	-88.1	74.1	35.8	39.8	37.8	146.48393	2-3					
4	-10.365	-6.924	2495.87268	-70.4	11.6	-84.9	20.6	40.70139	0.641	-87.9	81.2	32.1	50.2	48.9	216.31942	3-4					
5	-16.077	-4.360	2581.60553	-62.0	16.7	-89.2	27.6	42.11255	0.571	-93.7	83.6	32.1	55.2	50.8	184.39574	4-5					
6	-15.836	-12.384	2414.17975	-56.8	14.0	-85.3	31.2	39.36943	0.711	-93.3	75.9	35.9	44.8	38.6	233.77828	5-6					
7	-10.504	-13.784	2348.30533	-66.9	10.0	-83.3	23.9	38.30794	0.769	-88.1	74.1	35.8	39.8	37.8	166.68018	6-7					
8	-8.416	-17.262	2278.31204	-69.8	7.9	-82.3	22.4	37.05601	0.836	-86.0	70.5	37.8	33.6	32.5	121.64905	7-8					
9	-8.147	-10.912	2352.97037	-73.8	9.1	-83.1	19.0	38.98626	0.730	-85.6	76.8	34.1	43.2	42.6	190.49627	8-9					
10	-7.863	-6.857	2572.60797	-76.4	10.2	-84.1	15.9	41.78608	0.580	-85.2	84.8	30.3	54.7	54.4	241.77400	9-10					
11	-13.204	-0.702	2645.77353	-68.2	15.1	-89.0	22.4	43.10761	0.521	-90.8	87.0	30.2	58.7	56.6	173.05942	10-11					
12	-19.825	3.239	2793.73083	-60.2	21.9	-81.9	29.4	45.41761	0.411	-97.0	91.0	30.5	65.8	60.7	232.17572	11-12					
13	-19.063	-7.378	2544.53061	-55.3	18.2	-89.2	32.9	41.43294	0.602	-96.4	80.9	34.2	53.1	45.1	304.04447	12-13					
14	-18.697	-14.898	2400.87814	-48.8	14.9	-85.1	36.8	38.98254	0.724	-95.8	73.8	37.9	43.8	33.2	215.79764	13-14					
15	-13.113	-16.362	2421.42981	-58.6	10.8	-83.3	29.5	37.82448	0.795	-90.7	71.8	37.7	37.5	33.1	174.40394	14-15					
16	-8.416	-17.262	2278.31204	-69.8	7.9	-82.3	22.4	37.05601	0.836	-86.0	70.5	37.8	33.6	32.5	144.79073	15-16					

JULY 31, 1964 13 HR 8 MIN 50 SEC 1 MS

TAB NO 2

ATLAS PHOTO NO 2

POD SEQUENCE NO 7

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				1018.798		2100.69925	-3.295	-35.764	3836.155	1.935	-74.769	117.033				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.198	-17.360	2488.56958	-60.2	10.8	-85.6	28.7	39.61325	0.691	-92.4	70.8	38.2	35.5	31.7	0.	0-1
2	-13.102	-9.671	2436.54742	-64.2	12.9	-85.3	25.8	39.75788	0.684	-90.8	78.3	34.0	46.9	43.7	228.91461	1-2
3	-10.516	-13.817	2337.88791	-66.9	10.0	-83.3	24.0	38.13601	0.770	-88.1	74.1	35.8	39.8	37.8	145.73919	2-3
4	-10.377	-6.596	2444.46582	-70.9	11.6	-84.9	20.6	40.51541	0.642	-87.9	81.2	32.1	50.1	48.8	215.12197	3-4
5	-16.062	-4.448	2569.65436	-62.0	16.7	-89.1	27.6	41.91801	0.573	-93.7	83.5	32.2	55.1	50.7	183.47698	4-5
6	-15.823	-12.424	2403.43799	-56.8	14.0	-85.3	31.2	39.19429	0.711	-93.4	75.9	35.9	44.7	38.5	232.39289	5-6
7	-10.516	-13.817	2337.88791	-66.9	10.0	-83.3	24.0	38.13601	0.770	-88.1	74.1	35.8	39.8	37.8	165.92656	6-7
8	-8.436	-17.278	2268.25275	-69.8	7.9	-82.3	22.4	36.89242	0.836	-86.0	70.5	37.8	33.6	32.5	121.08252	7-8
9	-8.171	-10.960	2382.22311	-73.7	9.1	-83.0	19.1	38.81123	0.730	-85.6	76.8	34.1	43.2	42.6	189.54017	8-9
10	-7.886	-6.954	2560.51053	-76.4	10.3	-84.0	16.0	41.58976	0.581	-85.2	84.7	30.3	54.6	54.3	240.27017	9-10
11	-13.202	-0.905	2633.18219	-68.2	15.1	-88.9	22.5	42.90247	0.523	-90.8	86.8	30.2	58.5	56.4	172.17758	10-11
12	-19.788	3.079	2779.68951	-60.1	21.9	-82.1	29.4	45.18541	0.414	-97.0	90.8	30.5	65.7	60.5	230.57480	11-12
13	-19.034	-7.444	2532.92038	-55.3	18.2	-89.1	32.9	41.24600	0.603	-96.4	80.9	34.2	53.0	45.1	301.56548	12-13
14	-18.672	-14.926	2390.23782	-48.8	14.9	-85.1	36.8	38.81030	0.725	-95.8	73.8	37.9	43.8	33.2	214.60986	13-14
15	-13.113	-16.352	2411.20694	-58.6	10.8	-83.2	29.5	37.65791	0.795	-90.7	71.8	37.7	37.5	33.0	173.60243	14-15
16	-8.436	-17.278	2268.25275	-69.8	7.9	-82.3	22.4	36.89242	0.836	-86.0	70.5	37.8	33.6	32.5	144.15977	15-16

JULY 31, 1964 13 HR 8 MIN 55 SEC 121 MS

TAB NO 3

ATLAS PHOTO NO 3

POD SEQUENCE NO 9

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				1013.679				2091.13651	-3.313	-35.729	3826.592	1.937	-74.742	117.028		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.179	-17.376	2278.31949	-60.2	10.8	-85.6	28.8	39.43588	0.691	-92.4	70.7	38.2	35.5	31.6	0.	0-1
2	-13.102	-9.725	2423.55450	-64.1	12.9	-85.3	25.9	39.57835	0.684	-90.8	78.3	34.0	46.8	43.6	227.87229	1-2
3	-10.527	-13.849	2327.46375	-66.9	10.0	-83.3	24.0	37.96797	0.770	-88.1	74.1	35.9	39.7	37.7	144.99529	2-3
4	-10.389	-6.668	2473.05612	-70.9	11.6	-84.9	20.7	40.32939	0.643	-87.9	81.1	32.1	50.0	48.7	213.92725	3-4
5	-16.048	-4.536	2557.70245	-62.0	16.7	-89.1	27.6	41.72305	0.574	-93.7	83.4	32.2	55.0	50.6	182.55914	4-5
6	-15.811	-12.464	2392.68948	-56.8	14.0	-85.3	31.2	39.01904	0.712	-93.4	75.8	35.9	44.7	38.5	231.01206	5-6
7	-10.527	-13.849	2327.46375	-66.9	10.0	-83.3	24.0	37.96797	0.770	-88.1	74.1	35.9	39.7	37.7	165.17253	6-7
8	-8.457	-17.294	2258.18643	-69.7	7.9	-82.3	22.5	36.72872	0.837	-86.0	70.5	37.8	33.6	32.5	120.51604	7-8
9	-8.193	-11.007	2371.47070	-73.7	9.1	-83.0	19.1	38.63612	0.731	-85.6	76.7	34.1	43.1	42.5	188.58504	8-9
10	-7.909	-6.051	2548.41550	-76.3	10.3	-84.0	16.0	41.39348	0.583	-85.2	84.6	30.4	54.5	54.2	238.77250	9-10
11	-13.200	-1.018	2620.59628	-68.1	15.1	-88.9	22.5	42.69742	0.525	-90.8	86.7	30.2	58.4	56.3	171.29731	10-11
12	-19.750	2.920	2765.67163	-60.1	21.8	-82.2	29.4	44.96159	0.417	-97.0	90.7	30.5	65.5	60.3	228.98725	11-12
13	-19.006	-7.520	2521.30685	-55.2	18.2	-89.1	32.9	41.05501	0.604	-96.4	80.8	34.2	52.9	45.0	299.11053	12-13
14	-18.646	-14.955	2379.59009	-48.8	14.9	-85.1	36.8	38.63753	0.726	-95.8	73.7	37.9	43.7	33.2	213.42489	13-14
15	-13.114	-16.402	2300.97647	-58.6	10.8	-83.2	29.5	37.49122	0.795	-90.7	71.8	37.7	37.5	33.0	172.80068	14-15
16	-8.457	-17.294	2258.18643	-69.7	7.9	-82.3	22.5	36.72872	0.837	-86.0	70.5	37.8	33.6	32.5	143.52840	15-16

RA-VII CAMFKA FB

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JULY 31, 1964 13 HR 9 MIN 0 SEC 241 MS

TAB NO 4 ATLAS PHOTO NO 4 POD SEQUENCE NO 11

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				1008.559	2081.56647	-3.331	-35.694	3817.022	1.938	-74.714	117.024
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-12.171	-17.395	2268.04018	-60.2	10.8	-85.6	28.8	39.25773	0.692	-92.4	70.7 38.2 35.4 31.6 0. 0-1
2	-13.101	-9.782	2412.51224	-64.1	12.9	-85.3	25.9	39.39803	0.685	-90.8	78.1 34.0 46.7 43.5 226.77150 1-2
3	-10.539	-13.883	2316.99924	-66.8	10.0	-83.3	24.1	37.79727	0.770	-88.1	74.0 35.9 39.7 37.7 144.24390 2-3
4	-10.401	-6.742	2461.59149	-70.8	11.6	-84.8	20.7	40.14247	0.644	-87.9	81.0 32.1 49.9 48.7 212.72051 3-4
5	-16.033	-4.627	2545.68860	-62.0	16.6	-89.0	27.6	41.52709	0.575	-93.7	83.4 32.2 54.9 50.5 181.63483 4-5
6	-15.799	-12.506	2381.89615	-56.8	13.9	-85.3	31.2	38.84306	0.712	-93.4	75.8 35.9 44.6 38.4 229.61696 5-6
7	-10.539	-13.883	2316.99924	-66.8	10.0	-83.3	24.1	37.79727	0.770	-88.1	74.0 35.9 39.7 37.7 164.41433 6-7
8	-8.477	-17.311	2248.08643	-69.6	7.9	-82.3	22.5	36.56447	0.837	-86.0	70.5 37.8 33.5 32.4 119.94440 7-8
9	-8.214	-11.056	2360.67325	-73.6	9.1	-83.0	19.2	38.46628	0.732	-85.7	76.7 34.1 43.1 42.4 187.62111 8-9
10	-7.932	-3.150	2536.25885	-76.3	10.3	-84.0	16.1	41.19621	0.584	-85.2	84.5 30.4 54.4 54.1 237.26074 9-10
11	-13.198	-1.133	2607.94174	-68.1	15.0	-88.8	22.6	42.49125	0.527	-90.9	86.6 30.2 58.3 56.2 170.41066 10-11
12	-19.713	2.759	2751.57748	-60.1	21.8	-82.4	29.4	44.73254	0.419	-97.0	90.5 30.5 65.3 60.1 227.39275 11-12
13	-18.978	-7.593	2509.67305	-55.2	18.1	-89.0	32.9	40.86510	0.605	-96.4	80.7 34.2 52.9 44.9 296.63853 12-13
14	-18.621	-14.986	2368.90146	-48.8	14.8	-85.1	36.8	38.46411	0.726	-95.8	73.7 37.9 43.7 33.1 212.22765 13-14
15	-13.114	-16.423	2290.70935	-58.5	10.8	-83.2	29.6	37.32393	0.795	-90.7	71.8 37.7 37.5 33.0 171.99476 14-15
16	-8.477	-17.311	2248.08643	-69.6	7.9	-82.3	22.5	36.56447	0.837	-86.0	70.5 37.8 33.5 32.4 142.89395 15-16

JULY 31, 1964 13 HR 9 MIN 5 SEC 361 MS

TAB NO 5 ATLAS PHOTO NO 5 POD SEQUENCE NO 13

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				1003.439	2071.98959	-3.349	-35.659	3807.445	1.940	-74.687	117.019
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-12.162	-17.413	2257.79227	-60.1	10.8	-85.6	28.8	39.07776	0.693	-92.4	70.7 38.2 35.4 31.6 0. 0-1
2	-13.101	-9.843	2401.35492	-64.1	12.9	-85.2	25.9	39.21582	0.686	-90.8	78.1 34.0 46.7 43.5 225.51574 1-2
3	-10.550	-13.921	2406.44431	-66.8	10.0	-83.3	24.1	37.62510	0.771	-88.1	74.0 35.9 39.6 37.6 143.47276 2-3
4	-10.413	-6.822	2449.99442	-70.8	11.6	-84.8	20.8	39.95339	0.645	-88.0	80.9 32.1 49.9 48.6 211.48022 3-4
5	-16.018	-4.724	2533.52188	-61.9	16.6	-89.0	27.7	41.32863	0.577	-93.7	83.3 32.2 54.8 50.3 180.69312 4-5
6	-15.786	-12.554	2371.00143	-56.7	13.9	-85.3	31.2	38.66543	0.713	-93.4	75.7 35.9 44.6 38.3 228.17988 5-6
7	-10.550	-13.921	2406.44431	-66.8	10.0	-83.3	24.1	37.62510	0.771	-88.1	74.0 35.9 39.6 37.6 163.64607 6-7
8	-8.498	-17.333	2237.91351	-69.6	7.9	-82.3	22.6	36.39904	0.837	-86.0	70.5 37.8 33.5 32.4 119.35983 7-8
9	-8.237	-11.110	2449.77167	-73.5	9.1	-83.0	19.2	38.28275	0.732	-85.7	76.6 34.1 43.0 42.4 186.63398 8-9
10	-7.956	-3.255	2523.94510	-76.2	10.3	-84.0	16.2	40.99640	0.586	-85.2	84.4 30.4 54.3 53.9 235.70459 9-10
11	-13.196	-1.256	2595.10843	-68.1	15.0	-88.8	22.6	42.28217	0.526	-90.9	86.5 30.3 58.2 56.0 169.50581 10-11
12	-19.675	2.988	2737.25995	-60.1	21.7	-82.6	29.4	44.49986	0.422	-97.0	90.3 30.5 65.2 59.9 225.76118 11-12
13	-18.949	-7.673	2497.83267	-55.2	18.1	-89.0	32.9	40.67301	0.606	-96.4	80.6 34.2 52.8 44.8 294.08910 12-13
14	-18.596	-15.021	2358.12210	-48.8	14.8	-85.1	36.8	38.28923	0.727	-95.8	73.7 37.9 43.6 33.1 210.99608 13-14
15	-13.114	-16.449	2280.36264	-58.5	10.8	-83.2	29.6	37.15535	0.796	-90.7	71.7 37.7 37.4 32.9 171.17878 14-15
16	-8.498	-17.333	2237.91351	-69.6	7.9	-82.3	22.6	36.39904	0.837	-86.0	70.5 37.8 33.5 32.4 142.25322 15-16

JULY 31, 1964 13 HR 9 MIN 10 SEC 481 MS

TAB NO 6 ATLAS PHOTO NO 6 POD SEQUENCE NO 15

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				998.319	2062.40570	-3.367	-35.624	3797.861	1.942	-74.660	117.014
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-12.153	-17.430	2247.51547	-60.1	10.8	-85.5	28.8	38.89772	0.693	-92.4	70.7 38.2 35.4 31.6 0. 0-1
2	-13.101	-9.905	2390.19400	-64.0	12.9	-85.2	26.0	39.03355	0.687	-90.8	78.1 34.0 46.6 43.4 224.26684 1-2
3	-10.562	-13.960	2295.88376	-66.7	10.0	-83.2	26.1	37.45283	0.771	-88.1	74.0 35.9 39.6 37.6 142.70290 2-3
4	-10.425	-6.902	2438.39694	-70.7	11.6	-84.8	20.8	39.76431	0.646	-88.0	80.9 32.2 49.8 48.5 210.24376 3-4
5	-16.003	-4.821	2521.35757	-61.9	16.6	-88.9	27.7	41.13021	0.578	-93.7	83.2 32.2 54.7 50.2 179.75282 4-5
6	-15.774	-12.601	2360.10123	-56.7	13.9	-85.3	31.2	38.48771	0.714	-93.4	75.7 35.9 44.5 38.3 226.74892 5-6
7	-10.562	-13.960	2295.88376	-66.7	10.0	-83.2	24.1	37.45283	0.771	-88.1	74.0 35.9 39.6 37.6 162.87739 6-7
8	-8.519	-17.354	2227.73419	-69.5	7.9	-82.2	22.6	36.23350	0.837	-86.0	70.5 37.8 33.5 32.4 118.77564 7-8
9	-8.259	-11.164	2438.86639	-73.5	9.2	-83.0	19.3	38.10516	0.733	-85.7	76.6 34.1 43.0 42.3 185.64844 8-9
10	-7.980	-3.360	2511.63730	-76.2	10.3	-84.0	16.2	40.79669	0.588	-85.2	84.3 30.4 54.2 53.8 234.15631 9-10
11	-13.194	-1.378	2502.28491	-68.0	15.0	-88.7	22.6	42.07324	0.530	-90.9	86.4 30.3 58.0 55.9 168.60319 10-11
12	-19.637	2.419	2722.97278	-60.0	21.6	-82.8	29.5	44.26767	0.425	-97.0	90.2 30.5 65.0 59.7 224.14511 11-12
13	-18.921	-7.752	2486.02725	-55.2	18.0	-89.0	32.9	40.48090	0.607	-96.4	80.6 34.2 52.7 44.7 291.56799 12-13
14	-18.570	-15.057	2347.33646	-48.8	14.8	-85.1	36.8	38.11424	0.727	-95.8	73.6 38.0 43.6 33.0 209.76824 13-14
15	-13.114	-16.475	2270.00916	-58.5	10.8	-83.2	29.6	36.98665	0.796	-90.7	71.7 37.7 37.4 32.9 170.36267 14-15
16	-8.519	-17.354	2227.73419	-69.5	7.9	-82.2	22.6	36.23350	0.837	-86.0	70.5 37.8 33.5 32.4 141.61210 15-16

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 9 MIN 15 SEC 600 MS

TAB NO 7

ATLAS PHOTO NO 7

POD SEQUENCE NO 17

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-12.144	-17.448	2237.22986	-60.1	10.8	-85.5	28.9	38.71668	0.694	-92.4	70.7	38.2	35.3	31.5	0.	0-1	
2	-13.101	-9.969	2378.96823	-64.0	12.8	-85.2	26.0	38.85023	0.688	-90.8	78.0	34.0	46.5	43.3	222.93327	1-2	
3	-10.574	-14.001	2285.26971	-66.7	10.0	-83.2	24.2	37.27970	0.772	-88.2	73.9	35.9	39.5	37.5	241.92365	2-3	
4	-10.437	-6.985	2426.72220	-70.7	11.6	-84.8	20.9	39.57358	0.648	-88.0	80.8	32.2	49.7	48.4	208.98837	3-4	
5	-15.988	-4.921	2509.11240	-61.9	16.5	-88.9	27.7	40.93048	0.580	-93.7	83.1	32.2	54.6	50.1	178.80662	4-5	
6	-15.762	-12.651	2349.14676	-56.7	13.9	-85.2	31.3	36.30910	0.715	-93.4	75.6	36.0	44.4	38.2	225.29654	5-6	
7	-10.574	-14.001	2285.26971	-66.7	10.0	-83.2	24.2	37.27970	0.772	-88.2	73.9	35.9	39.5	37.5	162.10537	6-7	
8	-8.540	-17.378	2217.50992	-69.5	7.9	-82.2	22.7	36.06724	0.836	-86.1	70.4	37.9	33.5	32.3	118.18476	7-8	
9	-8.281	-11.221	2327.89737	-73.4	9.2	-83.0	19.4	37.92653	0.734	-85.7	76.5	34.1	42.9	42.2	184.64896	8-9	
10	-8.004	-3.469	2499.23679	-76.2	10.3	-83.9	16.3	40.59548	0.589	-85.2	84.2	30.4	54.0	53.7	232.58390	9-10	
11	-13.192	-1.503	2569.36459	-68.0	15.0	-88.6	22.7	41.86274	0.532	-90.9	86.3	30.3	57.9	55.8	167.69378	10-11	
12	-19.599	2.246	2708.58401	-60.0	21.6	-82.9	29.5	44.03383	0.428	-97.0	89.9	30.6	64.6	59.5	222.52262	11-12	
13	-18.893	-7.834	2474.15411	-55.2	18.0	-88.9	33.0	42.87770	0.609	-96.4	80.5	34.3	52.6	44.6	289.01815	12-13	
14	-18.545	-15.095	2336.50565	-48.8	14.7	-85.0	36.8	37.93853	0.728	-95.8	73.6	38.0	43.5	33.0	208.52317	13-14	
15	-13.114	-16.503	2259.61087	-58.4	10.8	-83.2	29.6	36.81723	0.796	-90.7	71.7	37.8	37.4	32.8	169.54379	14-15	
16	-8.540	-17.378	2217.50992	-69.5	7.9	-82.2	22.7	36.06724	0.838	-86.1	70.4	37.9	33.5	32.3	140.96834	15-16	

JULY 31, 1964 13 HR 9 MIN 20 SEC 720 MS

TAB NO 8

ATLAS PHOTO NO 8

POD SEQUENCE NO 19

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-12.135	-17.466	2226.93530	-60.0	10.8	-85.5	28.9	38.53389	0.695	-92.4	70.7	38.2	35.3	31.5	0.	0-1	
2	-13.102	-10.039	2367.62698	-64.0	12.8	-85.2	26.0	38.66502	0.689	-90.8	78.0	34.0	46.5	43.2	221.43913	1-2	
3	-10.587	-14.047	2274.56219	-66.6	10.0	-83.2	24.2	37.10504	0.773	-88.2	73.9	35.9	39.5	37.5	141.12640	2-3	
4	-10.451	-7.074	2414.90701	-70.6	11.6	-84.7	20.9	39.38135	0.649	-88.0	80.7	32.2	49.6	48.3	207.69599	3-4	
5	-15.974	-5.028	2496.71820	-61.8	16.5	-88.9	27.7	40.72831	0.581	-93.7	83.0	32.2	54.5	50.0	177.84816	4-5	
6	-15.750	-12.706	2338.09708	-56.6	13.8	-85.2	31.3	38.12895	0.715	-93.4	75.6	36.0	44.4	38.1	223.80091	5-6	
7	-10.587	-14.047	2274.56219	-66.6	10.0	-83.2	24.2	37.10504	0.773	-88.2	73.9	35.9	39.5	37.5	161.32719	6-7	
8	-8.562	-17.406	2207.20837	-69.4	7.9	-82.2	22.7	37.74607	0.838	-86.1	70.4	37.9	33.4	32.3	117.58156	7-8	
9	-8.305	-11.283	2316.81509	-73.4	9.2	-83.0	19.4	37.92653	0.735	-85.7	76.5	34.1	42.8	42.2	183.62313	8-9	
10	-8.029	-3.585	2486.66296	-76.1	10.3	-83.9	16.4	40.39146	0.591	-85.2	84.1	30.4	53.9	53.6	230.96169	9-10	
11	-13.191	-1.637	2556.26096	-67.9	15.0	-88.6	22.7	41.64926	0.534	-90.9	86.1	30.3	57.8	55.6	166.77057	10-11	
12	-19.562	2.064	2693.98776	-60.0	21.5	-96.9	29.5	43.79663	0.431	-97.0	89.9	30.6	64.6	59.2	220.87646	11-12	
13	-18.865	-7.923	2462.15839	-55.1	17.9	-88.9	33.0	40.09251	0.610	-96.4	80.4	34.3	52.5	44.4	286.39531	12-13	
14	-18.521	-15.137	2325.59732	-48.7	14.7	-85.0	36.8	37.76157	0.729	-95.8	73.6	38.0	43.5	32.9	207.24382	13-14	
15	-13.115	-16.536	2249.13605	-58.4	10.8	-83.2	29.6	36.64655	0.797	-90.7	71.7	37.8	37.3	32.8	168.72002	14-15	
16	-8.562	-17.406	2207.20837	-69.4	7.9	-82.2	22.7	35.89972	0.838	-86.1	70.4	37.9	33.4	32.3	140.32044	15-16	

JULY 31, 1964 13 HR 9 MIN 25 SEC 840 MS

TAB NO 9

ATLAS PHOTO NO 9

POD SEQUENCE NO 21

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-12.126	-17.483	2216.63174	-60.0	10.8	-85.5	28.9	38.35106	0.696	-92.4	70.6	38.3	35.3	31.5	0.	0-1	
2	-13.103	-10.109	2356.28458	-63.9	12.8	-85.1	26.1	38.47979	0.690	-90.8	77.9	34.1	46.4	43.1	219.95515	1-2	
3	-10.600	-14.093	2263.85092	-66.6	10.0	-83.2	24.3	36.93031	0.773	-88.2	73.8	35.9	39.4	37.4	140.33090	2-3	
4	-10.464	-7.163	2403.09479	-70.6	11.6	-84.7	21.0	39.18877	0.650	-88.0	80.6	32.2	49.5	48.2	206.40866	3-4	
5	-15.960	-5.134	2484.33035	-61.8	16.5	-88.8	27.8	40.52625	0.583	-93.7	82.9	32.3	54.4	49.8	176.89168	4-5	
6	-15.739	-12.761	2327.04398	-56.6	13.8	-85.2	31.3	37.94874	0.716	-93.4	75.5	36.0	44.3	38.0	222.31309	5-6	
7	-10.600	-14.093	2263.85092	-66.6	10.0	-83.2	24.3	36.93031	0.773	-88.2	73.8	35.9	39.4	37.4	160.54886	6-7	
8	-8.584	-17.435	2196.90176	-69.3	7.9	-82.2	22.8	35.73212	0.838	-86.1	70.4	37.9	33.4	32.2	116.97916	7-8	
9	-8.328	-11.345	2305.73148	-73.3	9.2	-83.0	19.5	37.56558	0.736	-85.7	76.4	34.2	42.7	42.1	182.59967	8-9	
10	-8.054	-3.700	2474.09988	-76.0	10.3	-83.9	16.4	40.18762	0.593	-85.2	83.9	30.5	53.8	53.4	229.34946	9-10	
11	-13.190	-1.769	2543.17264	-67.9	14.9	-88.5	22.8	41.43602	0.537	-90.9	86.0	30.3	57.6	55.4	165.85024	10-11	
12	-19.524	1.884	2679.42941	-60.0	21.4	-96.7	29.5	43.56005	0.434	-97.0	89.7	30.6	64.4	59.0	219.24740	11-12	
13	-18.837	-8.011	2450.16455	-55.1	17.9	-88.8	33.0	39.89735	0.612	-96.4	80.3	34.3	52.4	44.3	283.80494	12-13	
14	-18.496	-15.180	2314.68608	-48.7	14.7	-85.0	36.8	37.58453	0.729	-95.8	73.5	38.0	43.4	32.8	205.96947	13-14	
15	-13.117	-16.569	2238.65576	-58.4	10.8	-83.2	29.7	36.47579	0.797	-90.7	71.6	37.8	37.3	32.7	167.89618	14-15	
16	-8.584	-17.435	2196.90176	-69.3	7.9	-82.2	22.8	35.73212	0.838	-86.1	70.4	37.9	33.4	32.2	139.67216	15-16	

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JULY 31, 1964 13 HR 9 MIN 30 SEC 960 MS

TAB NO 10 ATLAS PHOTO NO 10 POD SEQUENCE NO 23

TRAJECTORY DATA

SEC TO IMPACT 977.839 ALT 2023.99982 LAT -3.439 LCN -35.481 R 3759.455 V 1.949 PTH -74.549 AZ 116.995

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.117	-17.501	2206.31912	-60.0	10.8	-85.5	29.0	38.16915	0.697	-92.4	70.6	38.3	35.2	31.5	0.	0-1
2	-13.104	-10.176	2345.00412	-63.9	12.8	-85.1	26.1	38.29557	0.691	-90.8	77.8	34.1	46.3	43.0	218.57343	1-2
3	-10.612	-14.136	2253.18630	-66.5	10.0	-83.2	24.4	36.75632	0.774	-88.2	73.8	36.0	39.4	37.3	139.54887	2-3
4	-10.477	-7.248	2391.36072	-70.5	11.6	-84.7	21.1	38.99747	0.652	-88.0	80.5	32.2	49.4	48.0	205.14743	3-4
5	-15.946	-5.236	2472.03540	-61.8	16.4	-88.7	27.8	40.32570	0.585	-93.7	82.8	32.3	54.3	49.7	175.94721	4-5
6	-15.727	-12.812	2316.04102	-56.6	13.8	-85.2	31.3	37.76935	0.717	-93.4	75.5	36.0	44.3	38.0	220.85958	5-6
7	-10.612	-14.136	2253.18630	-66.5	10.0	-83.2	24.4	36.75632	0.774	-88.2	73.8	36.0	39.4	37.3	159.77555	6-7
8	-8.606	-17.460	2186.62863	-69.3	7.9	-82.2	22.9	35.56506	0.839	-86.1	70.4	37.9	33.3	32.2	116.38436	7-8
9	-8.352	-11.404	2294.70450	-73.3	9.7	-82.9	19.6	37.38601	0.736	-85.7	76.3	34.2	42.7	42.0	181.59260	8-9
10	-8.074	-3.811	2461.64035	-76.0	10.3	-83.9	16.5	39.98545	0.595	-85.2	83.8	30.5	53.7	53.3	227.77611	9-10
11	-13.189	-1.896	2530.20456	-67.9	14.9	-88.5	22.8	41.22474	0.539	-90.9	85.9	30.3	57.5	55.3	164.94310	10-11
12	-19.487	1.711	2665.04477	-59.9	21.4	-96.5	29.6	43.32628	0.436	-97.0	89.5	30.6	64.2	58.8	217.66084	11-12
13	-18.809	-8.095	2438.24640	-55.1	17.9	-88.8	33.0	39.70342	0.613	-96.3	80.2	34.3	52.3	44.2	281.30116	12-13
14	-18.472	-15.219	2303.81210	-48.7	14.7	-85.0	36.8	37.40814	0.730	-95.8	73.5	38.0	43.4	32.8	204.72116	13-14
15	-13.118	-16.599	2228.21106	-58.3	10.7	-83.2	29.8	36.30561	0.798	-90.7	71.6	37.8	37.2	32.7	167.07732	14-15
16	-8.606	-17.460	2186.62863	-69.3	7.9	-82.2	22.9	35.56506	0.839	-86.1	70.4	37.9	33.3	32.2	139.02629	15-16

JULY 31, 1964 13 HR 9 MIN 36 SEC 80 MS

TAB NO 11 ATLAS PHOTO NO 11 POD SEQUENCE NO 25

TRAJECTORY DATA

SEC TO IMPACT 972.719 ALT 2014.38062 LAT -3.458 LCN -35.444 R 3749.836 V 1.950 PTH -74.521 AZ 116.990

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.108	-17.519	2195.99768	-59.9	10.8	-85.4	29.0	37.98849	0.698	-92.4	70.6	38.3	35.2	31.4	0.	0-1
2	-13.104	-10.238	2333.80667	-63.8	12.8	-85.1	26.2	38.11271	0.692	-90.8	77.8	34.1	46.2	42.9	217.32442	1-2
3	-10.625	-14.175	2242.57874	-66.5	10.0	-83.2	24.4	36.58332	0.774	-88.2	73.7	36.0	39.3	37.3	138.78378	2-3
4	-10.490	-7.328	2379.72992	-70.5	11.6	-84.7	21.1	38.80784	0.653	-88.0	80.5	32.2	49.3	48.0	203.91896	3-4
5	-15.932	-5.332	2459.86166	-61.7	16.4	-88.7	27.8	40.12713	0.586	-93.7	82.7	32.3	54.2	49.6	175.01740	4-5
6	-15.716	-12.860	2305.10629	-56.5	13.8	-85.2	31.4	37.59106	0.718	-93.4	75.4	36.0	44.2	37.9	219.44856	5-6
7	-10.625	-14.175	2242.57874	-66.5	10.0	-83.2	24.4	36.58332	0.774	-88.2	73.7	36.0	39.3	37.3	159.00896	6-7
8	-8.628	-17.482	2176.40204	-69.2	7.9	-82.2	22.9	35.39875	0.839	-86.1	70.4	37.9	33.3	32.2	115.79997	7-8
9	-8.375	-11.459	2283.75372	-73.2	9.2	-82.9	19.6	37.20768	0.737	-85.7	76.3	34.2	42.6	41.9	180.60661	8-9
10	-8.103	-3.916	2449.31461	-75.9	10.4	-83.9	16.6	39.78543	0.596	-85.2	83.7	30.5	53.6	53.2	226.25047	9-10
11	-13.189	-2.017	2517.39087	-67.8	14.9	-88.4	22.9	41.01598	0.540	-90.9	85.8	30.4	57.4	55.2	164.05248	10-11
12	-19.451	1.947	2650.87585	-59.9	21.3	-96.4	29.6	43.09601	0.439	-97.0	89.4	30.6	64.1	58.6	216.12314	11-12
13	-18.781	-8.174	2426.42798	-55.1	17.8	-88.7	33.0	39.51109	0.614	-96.3	80.2	34.3	52.2	44.1	278.89939	12-13
14	-18.447	-15.255	2292.99719	-48.7	14.6	-85.0	36.8	37.23268	0.731	-95.8	73.4	38.0	43.3	32.7	203.50516	13-14
15	-13.119	-16.625	2217.81598	-58.3	10.7	-83.2	29.8	36.13624	0.798	-90.7	71.6	37.8	37.2	32.6	166.26500	14-15
16	-8.628	-17.482	2176.40204	-69.2	7.9	-82.2	22.9	35.39875	0.839	-86.1	70.4	37.9	33.3	32.2	138.38422	15-16

JULY 31, 1964 13 HR 9 MIN 41 SEC 200 MS

TAB NO 12 ATLAS PHOTO NO 12 POD SEQUENCE NO 27

TRAJECTORY DATA

SEC TO IMPACT 967.599 ALT 2004.75418 LAT -3.476 LCN -35.408 R 3740.209 V 1.952 PTH -74.493 AZ 116.985

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.099	-17.537	2185.66699	-59.9	10.8	-85.4	29.0	37.80775	0.698	-92.4	70.6	38.3	35.2	31.4	0.	0-1
2	-13.105	-10.299	2322.60559	-63.8	12.8	-85.1	26.2	37.92979	0.693	-90.8	77.7	34.1	46.2	42.9	216.08300	1-2
3	-10.637	-14.214	2231.96765	-66.4	10.0	-83.2	24.5	36.41023	0.775	-88.2	73.7	36.0	39.3	37.2	138.01995	2-3
4	-10.502	-7.408	2368.09879	-70.4	11.6	-84.7	21.2	38.61820	0.654	-88.0	80.4	32.3	49.2	47.9	202.69433	3-4
5	-15.917	-5.428	2447.68997	-61.7	16.4	-88.6	27.9	39.92858	0.588	-93.7	82.6	32.3	54.1	49.5	174.08872	4-5
6	-15.704	-12.907	2294.15608	-56.5	13.8	-85.1	31.4	37.41269	0.718	-93.4	75.4	36.0	44.1	37.8	218.04336	5-6
7	-10.637	-14.214	2231.96765	-66.4	10.0	-83.2	24.5	36.41023	0.775	-88.2	73.7	36.0	39.3	37.2	158.24202	6-7
8	-8.650	-17.504	2166.16916	-69.1	8.0	-82.2	23.0	35.23234	0.839	-86.1	70.3	37.9	33.3	32.1	115.21580	7-8
9	-8.397	-11.513	2272.79926	-73.1	9.2	-82.9	19.7	37.02928	0.738	-85.7	76.2	34.2	42.5	41.9	179.62209	8-9
10	-8.127	-4.021	2436.99475	-75.9	10.4	-83.8	16.6	39.58550	0.598	-85.2	83.6	30.5	53.4	53.1	224.73254	9-10
11	-13.187	-2.138	2504.58624	-67.8	14.9	-88.3	22.9	40.80736	0.542	-90.9	85.6	30.4	57.2	55.0	163.16372	10-11
12	-19.414	1.384	2636.73337	-59.9	21.3	-96.2	29.6	42.86617	0.442	-97.0	89.2	30.6	63.9	58.4	214.59847	11-12
13	-18.753	-8.252	2414.60828	-55.0	17.8	-88.7	33.0	39.31874	0.615	-96.3	80.1	34.3	52.1	44.0	276.52238	12-13
14	-18.423	-15.290	2282.17557	-48.7	14.6	-85.0	36.8	37.05709	0.731	-95.8	73.4	38.1	43.3	32.7	202.29292	13-14
15	-13.119	-16.651	2207.41400	-58.2	10.7	-83.2	29.8	35.96675	0.798	-90.7	71.5	37.8	37.2	32.6	165.45219	14-15
16	-8.650	-17.504	2166.16916	-69.1	8.0	-82.2	23.0	35.23234	0.839	-86.1	70.3	37.9	33.3	32.1	137.74172	15-16

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 9 MIN 46 SEC 320 MS

TAB NO 13

ATLAS PHOTO NO 13

POD SEQUENCE NO 29

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.090	-17.555	2175.32733	-59.8	10.7	-85.4	29.1	37.62659	0.699	-92.4	70.6	38.3	35.2	31.4	0
2	-13.105	-10.362	2311.37921	-63.8	12.8	-85.1	26.2	37.74645	0.693	-90.8	77.6	34.1	46.1	42.8	214.81883
3	-10.649	-14.254	2221.33438	-66.4	10.0	-83.2	24.5	36.23678	0.775	-88.2	73.7	36.0	39.2	37.2	137.25331
4	-10.515	-7.489	2456.44217	-70.4	11.6	-84.6	21.2	38.42816	0.655	-88.0	80.3	32.3	49.1	47.8	201.46662
5	-15.903	-5.525	2435.49042	-61.7	16.3	-88.6	27.9	39.72959	0.589	-93.7	82.5	32.3	54.0	49.4	173.15781
6	-15.692	-12.955	2283.20108	-56.5	13.7	-85.1	31.4	37.23391	0.719	-93.4	75.3	36.1	44.1	37.8	216.63539
7	-10.649	-14.254	2221.33438	-66.4	10.0	-83.2	24.5	36.23678	0.775	-88.2	73.7	36.0	39.2	37.2	157.47255
8	-8.671	-17.527	2155.91690	-69.1	8.0	-82.2	23.0	35.06562	0.839	-86.1	70.3	38.0	33.3	32.1	114.62933
9	-8.420	-11.568	2461.82214	-73.1	9.2	-82.9	19.8	36.85051	0.739	-85.7	76.2	34.2	42.5	41.8	178.63471
10	-8.151	-4.126	2424.65045	-75.8	10.4	-83.8	16.7	39.38518	0.599	-90.9	83.5	30.5	53.3	53.0	223.21297
11	-13.185	-2.259	2491.75540	-67.7	14.9	-88.3	23.0	40.59832	0.544	-97.0	89.1	30.7	63.7	58.2	162.27305
12	-19.377	1.220	2622.56973	-59.8	21.2	-96.0	29.6	42.63598	0.444	-97.0	89.1	30.7	63.7	58.2	213.07678
13	-18.725	-8.332	2402.76056	-55.0	17.7	-88.6	33.1	39.12594	0.617	-96.3	80.0	34.4	52.0	43.9	274.15185
14	-18.398	-15.326	2271.32999	-48.7	14.6	-85.0	36.8	36.88813	0.732	-95.8	73.4	38.1	43.2	32.6	201.07714
15	-13.120	-16.678	2146.99060	-58.2	10.7	-83.2	29.8	35.79692	0.799	-90.7	71.5	37.9	37.1	32.5	164.63716
16	-8.671	-17.527	2155.91690	-69.1	8.0	-82.2	23.0	35.06562	0.839	-86.1	70.3	38.0	33.3	32.1	137.09730

TAB NO 14

ATLAS PHOTO NO 14

POD SEQUENCE NO 31

JULY 31, 1964 13 HR 9 MIN 51 SEC 440 MS

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.081	-17.572	2164.97827	-59.8	10.7	-85.4	29.1	37.44500	0.700	-92.4	70.6	38.3	35.1	31.4	0
2	-13.104	-10.425	2300.12674	-63.7	12.8	-85.0	26.3	37.56269	0.694	-90.8	77.6	34.1	46.0	42.7	213.53147
3	-10.661	-14.294	2210.67838	-66.3	10.0	-83.2	24.6	36.06296	0.776	-88.2	73.6	36.0	39.2	37.1	136.48380
4	-10.527	-7.570	2344.75940	-70.3	11.6	-84.6	21.3	38.23768	0.656	-88.0	80.2	32.3	49.0	47.7	200.23589
5	-15.888	-5.622	2423.26218	-61.6	16.3	-88.5	27.2	39.55013	0.590	-93.7	82.4	32.3	53.9	49.2	172.22411
6	-15.679	-13.004	2272.21069	-56.5	13.7	-85.1	31.4	37.05672	0.720	-93.4	75.3	36.1	44.0	37.7	215.22440
7	-10.661	-14.294	2210.67838	-66.3	10.0	-83.2	24.6	36.06296	0.776	-88.2	73.6	36.0	39.2	37.1	156.70074
8	-8.692	-17.550	2145.64481	-69.0	8.0	-82.2	23.1	34.89857	0.840	-86.1	70.3	38.0	33.2	32.0	114.06049
9	-8.442	-11.624	2250.82162	-73.0	9.2	-82.9	19.8	36.67137	0.739	-85.7	76.1	34.2	42.4	41.7	177.64430
10	-8.175	-4.232	2412.28094	-75.8	10.4	-83.8	16.8	39.18444	0.601	-95.3	83.4	30.5	53.2	52.8	221.69160
11	-13.183	-2.381	2478.89731	-67.7	14.9	-88.2	23.0	40.38883	0.546	-90.9	85.4	30.4	57.0	54.7	161.38018
12	-19.340	1.056	2608.38382	-59.8	21.1	-95.9	29.6	42.40544	0.447	-97.0	88.9	30.7	63.6	58.0	211.55813
13	-18.696	-8.412	2390.88434	-55.0	17.7	-88.6	33.1	38.93268	0.618	-96.3	79.9	34.4	51.9	43.8	271.78731
14	-18.372	-15.363	2260.45975	-48.6	14.5	-85.0	36.8	36.70476	0.732	-95.8	73.3	38.1	43.2	32.6	199.85798
15	-13.120	-16.706	2186.54504	-58.2	10.7	-83.2	29.8	35.62672	0.799	-90.7	71.5	37.9	37.1	32.5	163.81954
16	-8.692	-17.550	2145.64481	-69.0	8.0	-82.2	23.1	34.89857	0.840	-86.1	70.3	38.0	33.2	32.0	136.45104

TAB NO 15

ATLAS PHOTO NO 15

POD SEQUENCE NO 33

JULY 31, 1964 13 HR 9 MIN 56 SEC 560 MS

TRAJECTORY DATA

PHOTO DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.073	-17.590	2154.62036	-59.8	10.7	-85.4	29.1	37.26333	0.701	-92.4	70.5	38.3	35.1	31.3	0
2	-13.104	-10.486	2288.87137	-63.7	12.8	-85.0	26.3	37.37888	0.695	-90.8	77.5	34.2	46.0	42.6	212.25203
3	-10.673	-14.334	2200.01727	-66.3	10.0	-83.1	24.6	35.88905	0.776	-88.2	73.6	36.0	39.1	37.1	135.71568
4	-10.539	-7.651	2333.07703	-70.3	11.6	-84.6	21.3	38.04721	0.657	-88.2	80.1	32.3	48.9	47.6	199.00913
5	-15.873	-5.720	2411.03699	-61.6	16.3	-88.5	28.0	39.33072	0.592	-93.7	82.3	32.4	53.7	49.1	171.29183
6	-15.667	-13.052	2261.21539	-56.4	13.7	-85.1	31.5	36.87544	0.720	-93.4	75.3	36.1	44.0	37.6	213.81954
7	-10.673	-14.334	2200.01727	-66.3	10.0	-83.1	24.6	35.88905	0.776	-88.2	73.6	36.0	39.1	37.1	155.92871
8	-8.713	-17.573	2135.36676	-68.9	8.0	-82.2	23.2	34.73143	0.840	-86.1	70.3	38.0	33.2	32.0	113.45198
9	-8.465	-11.680	2239.81808	-73.0	9.2	-82.9	19.9	36.49217	0.740	-85.7	76.1	34.3	42.4	41.6	176.65550
10	-8.199	-4.338	2399.91818	-75.7	10.4	-83.8	16.9	38.98382	0.603	-95.3	83.3	30.5	53.1	52.7	220.17824
11	-13.181	-2.502	2466.04941	-67.7	14.8	-88.2	23.1	40.17951	0.548	-90.9	85.3	30.4	56.9	54.6	160.48926
12	-19.303	0.893	2594.22504	-59.8	21.1	-95.7	29.7	42.17533	0.450	-97.0	88.7	30.7	63.4	57.8	210.05218
13	-18.668	-8.492	2379.00763	-55.0	17.6	-88.5	33.1	38.73940	0.619	-96.3	79.9	34.4	51.8	43.7	269.44733
14	-18.347	-15.400	2249.58353	-48.6	14.5	-85.0	36.8	36.52829	0.733	-95.8	73.3	38.1	43.1	32.5	198.64261
15	-13.120	-16.733	2176.09308	-58.1	10.7	-83.2	29.9	35.45642	0.800	-90.7	71.5	37.9	37.1	32.5	163.00177
16	-8.713	-17.573	2135.36676	-68.9	8.0	-82.2	23.2	34.73143	0.840	-86.1	70.3	38.0	33.2	32.0	135.80437

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 10 MIN 1 SEC 680 MS TAB NO 16 ATLAS PHOTO NO 16 POD SEQUENCE NO 35

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
947.120 1966.17603 -3.551 -35.260 3701.631 1.959 -74.378 116.966

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.064	-17.608	2144.25290	-59.7	10.7	-85.3	29.2	37.08288	0.702	-92.4	70.5	38.3	35.1	31.3	0.	0-1
2	-13.103	-10.546	2277.69952	-63.6	12.7	-85.0	26.4	37.19644	0.696	-90.8	77.5	34.2	45.9	42.5	211.11408	1-2
3	-10.681	-14.370	2189.41949	-66.2	10.0	-83.1	24.7	35.71617	0.777	-88.2	73.6	36.1	39.1	37.0	134.96350	2-3
4	-10.550	-7.727	2321.50391	-70.3	11.6	-84.6	21.4	37.85852	0.658	-88.0	80.1	32.3	48.9	47.5	197.81763	3-4
5	-15.857	-5.811	2398.93024	-61.6	16.3	-88.4	28.0	39.13323	0.593	-93.7	82.1	32.4	53.6	49.0	170.37033	4-5
6	-15.653	-13.096	2250.28360	-56.4	13.7	-85.1	31.5	36.69720	0.721	-93.4	75.2	36.1	43.9	37.6	212.45802	5-6
7	-10.683	-14.370	2189.41949	-66.2	10.0	-83.1	24.7	35.71617	0.777	-88.2	73.6	36.1	39.1	37.0	155.16057	6-7
8	-8.733	-17.592	2125.13837	-68.9	8.0	-82.1	23.2	34.56509	0.840	-86.1	70.3	38.0	33.2	32.0	112.87322	7-8
9	-8.486	-11.731	2228.99707	-72.9	9.2	-82.9	19.9	36.31432	0.741	-85.7	76.0	34.3	42.3	41.6	175.69021	8-9
10	-8.221	-4.437	2387.70123	-75.7	10.4	-83.8	16.9	38.78555	0.604	-85.3	83.2	30.6	53.0	52.6	218.71628	9-10
11	-13.178	-2.617	2453.39895	-67.6	14.8	-88.1	23.1	39.97275	0.550	-90.9	85.2	30.4	56.7	54.5	159.61161	10-11
12	-19.265	0.739	2580.26794	-59.8	21.0	-95.6	29.7	41.94849	0.452	-97.0	88.6	30.7	63.2	57.6	208.58369	11-12
13	-18.638	-8.566	2367.27189	-55.0	17.6	-88.5	33.1	38.54759	0.620	-96.3	79.8	34.4	51.8	43.6	267.20354	12-13
14	-18.320	-15.432	2238.75421	-48.6	14.5	-84.9	36.8	36.35258	0.734	-95.8	73.3	38.1	43.1	32.5	197.45981	13-14
15	-13.119	-16.756	2165.68823	-58.1	10.7	-83.1	29.9	35.28669	0.800	-90.7	71.4	37.9	37.0	32.4	162.18665	14-15
16	-8.733	-17.592	2125.13837	-68.9	8.0	-82.1	23.2	34.56509	0.840	-86.1	70.3	38.0	33.2	32.0	135.15963	15-16

JULY 31, 1964 13 HR 10 MIN 6 SEC 799 MS TAB NO 17 ATLAS PHOTO NO 17 POD SEQUENCE NO 37

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
942.000 1956.51328 -3.570 -35.223 3691.969 1.961 -74.350 116.961

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.055	-17.626	2133.87634	-59.7	10.7	-85.3	29.2	36.90334	0.702	-92.4	70.5	38.3	35.0	31.3	0.	0-1
2	-13.101	-10.601	2266.59048	-63.6	12.7	-85.0	26.4	37.01502	0.697	-90.8	77.4	34.2	45.8	42.5	210.08553	1-2
3	-10.693	-14.403	2178.86880	-66.2	10.0	-83.1	24.7	35.54467	0.777	-88.2	73.5	36.1	39.1	37.0	134.22351	2-3
4	-10.540	-7.798	2310.01382	-70.2	11.6	-84.5	21.4	37.67118	0.659	-88.0	80.0	32.3	48.8	47.4	196.65362	3-4
5	-15.840	-5.898	2386.91385	-61.6	16.2	-88.4	28.0	38.93722	0.595	-93.7	82.1	32.4	53.6	48.9	169.45732	4-5
6	-15.639	-13.137	2239.39917	-56.4	13.7	-85.1	31.5	36.51973	0.722	-93.4	75.2	36.1	43.9	37.5	211.13037	5-6
7	-10.693	-14.403	2178.86880	-66.2	10.0	-83.1	24.7	35.54467	0.777	-88.2	73.5	36.1	39.1	37.0	154.39526	6-7
8	-8.752	-17.608	2114.94656	-68.8	8.0	-82.1	23.3	34.39934	0.840	-86.1	70.2	38.0	33.2	32.0	112.30198	7-8
9	-8.506	-11.778	2218.03976	-72.9	9.2	-82.9	19.0	36.13748	0.742	-85.7	76.0	34.3	42.2	41.5	174.74295	8-9
10	-8.243	-4.532	2375.59592	-75.6	10.4	-83.8	17.0	38.58908	0.606	-85.3	83.1	30.6	52.9	52.5	217.29450	9-10
11	-13.174	-2.726	2440.78937	-67.6	14.8	-88.1	23.1	39.76797	0.551	-90.9	85.1	30.5	56.6	54.3	158.74413	10-11
12	-19.227	0.591	2566.46738	-59.8	20.9	-95.4	29.7	41.72419	0.455	-97.0	88.5	30.7	63.1	57.5	207.14531	11-12
13	-18.608	-8.637	2355.50525	-54.9	17.6	-88.5	33.1	38.35690	0.621	-96.3	79.7	34.4	51.7	43.5	265.03569	12-13
14	-18.292	-15.461	2227.95959	-48.6	14.5	-84.9	36.8	36.17741	0.734	-95.8	73.2	38.1	43.0	32.4	196.30225	13-14
15	-13.117	-16.776	2155.31805	-58.1	10.7	-83.1	29.9	35.11792	0.800	-90.7	71.4	37.9	37.0	32.4	161.37375	14-15
16	-8.752	-17.608	2114.94656	-68.8	8.0	-82.1	23.3	34.39934	0.840	-86.1	70.2	38.0	33.2	32.0	134.51643	15-16

JULY 31, 1964 13 HR 10 MIN 11 SEC 919 MS TAB NO 18 ATLAS PHOTO NO 18 POD SEQUENCE NO 39

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
936.880 1946.84283 -3.590 -35.185 3682.298 1.962 -74.321 116.956

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.046	-17.644	2123.49011	-59.7	10.7	-85.3	29.2	36.72367	0.703	-92.4	70.5	38.4	35.0	31.2	0.	0-1
2	-13.098	-10.655	2255.47507	-63.6	12.7	-85.0	26.4	36.83350	0.697	-90.8	77.4	34.2	45.8	42.4	209.06145	1-2
3	-10.702	-14.435	2168.31046	-66.1	10.0	-83.1	24.7	35.37184	0.778	-88.2	73.5	36.1	39.0	36.9	133.48418	2-3
4	-10.570	-7.869	2298.51968	-70.2	11.6	-84.5	21.5	37.48378	0.660	-88.0	79.9	32.3	48.7	47.3	195.49201	3-4
5	-15.823	-5.984	2374.89529	-61.6	16.2	-88.3	28.0	38.74118	0.596	-93.7	82.1	32.4	53.5	48.8	168.54502	4-5
6	-15.624	-13.177	2228.50702	-56.4	13.6	-85.1	31.5	36.34213	0.722	-93.4	75.1	36.1	43.8	37.5	209.80673	5-6
7	-10.702	-14.435	2168.31046	-66.1	10.0	-83.1	24.7	35.37184	0.778	-88.2	73.5	36.1	39.0	36.9	153.62956	6-7
8	-8.771	-17.624	2104.74670	-68.8	8.0	-82.1	23.3	34.23346	0.841	-86.1	70.2	38.0	33.1	31.9	111.73080	7-8
9	-8.526	-11.825	2207.17548	-72.8	9.3	-82.8	20.1	35.96053	0.742	-85.7	75.9	34.3	42.2	41.5	173.79645	8-9
10	-8.264	-4.626	2363.44097	-75.6	10.4	-83.7	17.0	38.39261	0.607	-85.3	83.0	30.6	52.8	52.4	215.87787	9-10
11	-13.170	-2.834	2428.22269	-67.6	14.8	-88.0	23.2	39.58323	0.553	-90.9	85.0	30.5	56.5	54.2	157.87795	10-11
12	-17.189	0.444	2552.68292	-59.7	20.9	-95.3	29.7	41.50015	0.457	-97.0	88.3	30.7	62.9	57.3	205.71634	11-12
13	-18.577	-8.707	2343.78403	-54.9	17.5	-88.4	33.1	38.18613	0.623	-96.3	79.6	34.4	51.6	43.4	262.88599	12-13
14	-18.265	-15.490	2217.15656	-48.6	14.4	-84.9	36.8	36.00211	0.735	-95.8	73.2	38.1	43.0	32.4	195.14712	13-14
15	-13.115	-16.797	2144.93327	-58.1	10.7	-83.1	29.9	34.94882	0.800	-90.7	71.4	37.9	37.0	32.4	160.56033	14-15
16	-8.771	-17.624	2104.74670	-68.8	8.0	-82.1	23.3	34.23346	0.841	-86.1	70.2	38.0	33.1	31.9	133.87260	15-16

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 10 MIN 17 SEC 39 MS TAB NO 19 ATLAS PHOTO NO 19 POD SEQUENCE NO 41

TRAJECTORY DATA				SEC TO IMPACT				ALT		LCN		R		V		PTH		AZ	
PHOTO DATA				931.760				1937.16516		-3.609		-35.147		3672.620		1.964		-74.292 116.951	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-12.037	-17.662	2113.09482	-59.7	10.7	-85.3	29.2	36.54962	0.703	-92.5	70.5	38.4	35.0	31.2	0.	0-1			
2	-13.097	-10.691	2244.72150	-63.7	12.7	-85.0	26.4	36.65788	0.698	-90.8	77.3	34.2	45.7	42.4	208.57448	1-2			
3	-10.712	-14.452	2158.02841	-66.1	10.0	-83.1	24.8	35.20411	0.778	-88.2	73.5	36.1	39.0	36.9	132.81184	2-3			
4	-10.580	-7.921	2287.45178	-70.1	11.6	-84.5	21.5	37.30331	0.661	-88.0	79.9	32.3	48.7	47.3	194.44766	3-4			
5	-15.808	-6.048	2363.37507	-61.5	16.2	-88.3	28.0	38.55327	0.597	-93.7	82.0	32.4	53.4	48.7	167.69264	4-5			
6	-15.611	-13.201	2217.92838	-56.4	13.6	-85.1	31.5	36.18963	0.723	-93.4	75.1	36.1	43.8	37.4	208.63223	5-6			
7	-10.712	-14.452	2158.02841	-66.1	10.0	-83.1	24.8	35.20411	0.778	-88.2	73.5	36.1	39.0	36.9	152.89591	6-7			
8	-8.790	-17.625	2094.76385	-68.8	8.0	-82.1	23.4	34.07111	0.841	-86.1	70.2	38.0	33.1	31.9	111.20202	7-8			
9	-8.546	-11.855	2196.63745	-72.8	9.3	-82.8	20.1	35.78887	0.742	-85.7	75.9	34.3	42.2	41.4	172.92872	8-9			
10	-8.285	-4.697	2351.90634	-75.5	10.4	-83.7	17.1	36.20453	0.608	-85.3	83.0	30.6	52.7	52.3	214.62145	9-10			
11	-13.168	-2.918	2416.25412	-67.5	14.8	-88.0	23.2	39.36823	0.554	-90.9	84.9	30.5	56.4	54.1	157.07450	10-11			
12	-19.154	0.329	2539.68271	-59.7	20.8	-95.2	29.7	41.28884	0.459	-97.0	88.2	30.7	62.8	57.1	204.43712	11-12			
13	-18.549	-8.756	2332.44536	-54.9	17.5	-88.4	33.1	37.98227	0.623	-96.3	79.6	34.4	51.5	43.4	261.04170	12-13			
14	-18.239	-15.502	2206.62973	-48.6	14.4	-84.9	36.8	35.83124	0.735	-95.8	73.2	38.1	42.9	32.4	194.11131	13-14			
15	-13.114	-16.802	2134.79852	-58.0	10.7	-83.1	29.9	34.78359	0.800	-90.7	71.4	37.9	37.0	32.4	159.77929	14-15			
16	-8.790	-17.625	2094.76385	-68.8	8.0	-82.1	23.4	34.07111	0.841	-86.1	70.2	38.0	33.1	31.9	133.24812	15-16			

JULY 31, 1964 13 HR 10 MIN 22 SEC 159 MS TAB NO 20 ATLAS PHOTO NO 20 POD SEQUENCE NO 43

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				926.640			1927.48029	-3.628	-35.109	3662.936	1.966	-74.262	116.946			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.026	-17.680	2102.69025	-59.7	10.7	-85.3	29.2	36.37870	0.703	-92.5	70.4	38.4	34.9	31.2	0.	0-1
2	-13.096	-10.717	2234.16968	-63.5	12.7	-84.9	26.5	36.48557	0.698	-90.8	77.3	34.2	45.7	42.4	208.39389	1-2
3	-10.722	-14.459	2147.89972	-66.1	10.0	-83.1	24.8	35.03888	0.778	-88.2	73.5	36.1	39.0	36.9	132.17735	2-3
4	-10.591	-7.961	2276.62234	-70.1	11.6	-84.5	21.6	37.12671	0.662	-88.0	79.6	32.3	48.6	47.2	193.46966	3-4
5	-15.794	-6.099	2352.13635	-61.5	16.2	-88.3	28.1	38.36993	0.597	-93.7	81.9	32.4	53.4	48.7	166.82772	4-5
6	-15.598	-13.214	2207.52374	-56.4	13.6	-85.0	31.5	35.99997	0.723	-93.4	75.1	36.1	43.8	37.4	207.54215	5-6
7	-10.722	-14.459	2147.89972	-66.1	10.0	-83.1	24.8	35.03888	0.778	-88.2	73.5	36.1	39.0	36.9	152.17994	6-7
8	-8.809	-17.619	2084.90097	-68.7	8.0	-82.1	23.4	33.91070	0.840	-86.1	70.2	38.0	33.2	31.9	110.69706	7-8
9	-8.566	-11.876	2186.28116	-72.7	9.3	-82.8	20.1	35.62016	0.743	-85.7	75.9	34.3	42.2	41.4	172.10536	8-9
10	-8.307	-4.757	2340.61368	-75.5	10.5	-83.7	17.1	38.02115	0.609	-85.3	82.9	30.6	52.7	52.3	213.45573	9-10
11	-13.166	-2.987	2404.62125	-67.5	14.8	-87.9	23.2	39.17870	0.555	-90.9	84.8	30.5	56.4	54.1	156.30613	10-11
12	-19.122	0.232	2527.12375	-59.7	20.8	-95.1	29.7	41.08469	0.460	-97.0	88.1	30.7	62.7	57.0	203.24264	11-12
13	-18.522	-8.794	2321.44833	-54.9	17.5	-88.4	33.1	37.80251	0.624	-96.3	79.6	34.4	51.5	43.3	259.37043	12-13
14	-18.213	-15.505	2196.25589	-48.7	14.4	-84.9	36.8	35.66282	0.735	-95.8	73.2	38.1	42.9	32.4	193.14295	13-14
15	-13.113	-16.798	2124.78928	-58.0	10.7	-83.1	29.9	34.62050	0.800	-90.7	71.4	37.9	37.0	32.4	159.01637	14-15
16	-8.809	-17.619	2084.90097	-68.7	8.0	-82.1	23.4	33.91070	0.840	-86.1	70.2	38.0	33.2	31.9	132.63432	15-16

JULY 31, 1964 13 HR 10 MIN 27 SEC 279 MS TAB NO 21 ATLAS PHOTO NO 21 POD SEQUENCE NO 45

TRAJECTORY DATA								SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
								921.520		1917.78760	-3.647	-35.071	3653.243	1.968	-74.233	116.941
PHOTO DATA																
T	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-12.019	-17.698	2092.27594	-59.7	10.7	-85.3	29.2	36.20754	0.704	-92.5	70.4	38.4	34.9	31.2	0.	0-1
2	-13.095	-10.742	2223.60394	-63.5	12.7	-84.9	26.5	36.31302	0.698	-90.8	77.3	34.2	45.7	42.3	208.20791	1-2
3	-10.732	-14.467	2137.75809	-66.1	10.0	-83.1	24.8	34.87344	0.778	-88.2	73.5	36.1	39.0	36.9	131.54169	2-3
4	-10.602	-8.002	2265.77933	-70.1	11.6	-84.5	21.6	36.94990	0.662	-88.0	79.8	32.3	48.6	47.2	192.49063	3-4
5	-15.780	-6.151	2340.88254	-61.5	16.1	-88.3	28.1	38.18635	0.598	-93.7	81.9	32.4	53.3	48.6	166.05356	4-5
6	-15.585	-13.228	2197.10538	-56.4	13.6	-85.0	31.5	35.83007	0.723	-93.7	81.9	32.4	53.3	48.6	166.05356	4-5
7	-10.732	-14.467	2137.75809	-66.1	10.0	-83.1	24.8	34.87344	0.778	-88.2	73.5	36.1	43.8	37.4	206.45119	5-6
8	-8.828	-17.612	2075.02621	-68.7	8.0	-82.1	23.4	33.75009	0.840	-86.1	70.2	38.0	33.2	31.9	151.46293	6-7
9	-8.586	-11.897	2175.91196	-72.7	9.3	-82.8	20.2	35.45124	0.743	-85.7	75.9	34.3	42.1	41.4	110.19106	7-8
10	-8.328	-4.816	2329.30844	-75.5	10.5	-83.7	17.2	37.83757	0.609	-85.3	82.9	30.6	52.6	52.2	212.28975	8-10
11	-13.164	-3.057	2392.97516	-67.5	14.8	-87.9	23.3	38.98895	0.556	-90.9	84.8	30.5	56.3	54.0	155.53663	10-11
12	-19.089	0.135	2514.55469	-59.7	20.8	-95.0	29.7	40.88037	0.462	-97.0	88.0	30.7	62.6	56.9	202.04975	11-12
13	-18.494	-8.831	2310.38693	-54.9	17.4	-88.4	33.1	37.62243	0.624	-96.3	79.5	34.4	51.5	43.3	257.70247	12-13
14	-18.188	-15.508	2185.86862	-48.7	14.4	-84.9	36.7	35.49418	0.735	-95.8	73.2	38.1	42.9	32.4	192.17325	13-14
15	-13.112	-16.794	2114.76730	-58.0	10.7	-83.1	29.9	34.45720	0.800	-90.7	71.4	37.9	37.0	32.4	158.25232	14-15
16	-8.828	-17.612	2075.02621	-68.7	8.0	-82.1	23.4	33.75009	0.840	-86.1	70.2	38.0	33.2	31.9	132.01941	15-16

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JULY 31, 1964 13 HR 10 MIN 32 SEC 399 MS

TAB NO 22

ATLAS PHOTO NO 22

POD SEQUENCE NO 47

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										916.400	1908.08768	-3.667	-35.033	3643.543	1.970	-74.203	116.936
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-12.010	-17.716	2091.85251	-59.7	10.7	-85.3	29.2	36.03541	0.704	-92.5	70.4	38.4	34.9	31.1	0.	0-1	
2	-13.094	-10.771	2212.97601	-63.5	12.7	-84.9	26.5	36.13946	0.699	-90.8	77.3	34.2	45.7	42.3	207.94489	1-2	
3	-10.743	-14.477	2127.56616	-66.0	10.0	-83.1	24.8	34.70718	0.778	-88.2	73.5	36.1	39.0	36.9	130.89634	2-3	
4	-10.612	-8.045	2254.86533	-70.1	11.6	-84.5	21.6	36.77193	0.662	-88.0	79.8	32.3	48.6	47.1	191.49483	3-4	
5	-15.765	-6.205	2329.54910	-61.5	16.1	-88.2	28.1	38.00148	0.599	-93.7	81.8	32.4	53.3	48.6	165.22543	4-5	
6	-15.572	-13.244	2186.63199	-56.4	13.6	-85.0	31.5	35.65928	0.723	-93.4	75.1	36.1	43.8	37.4	205.34004	5-6	
7	-10.743	-14.477	2127.56616	-66.0	10.0	-83.1	24.8	34.70718	0.778	-88.2	73.5	36.1	39.0	36.9	150.74107	6-7	
8	-8.847	-17.608	2065.10983	-68.6	8.1	-82.1	23.4	33.58881	0.840	-86.1	70.3	38.0	33.2	32.0	109.67854	7-8	
9	-8.607	-11.920	2165.48535	-72.7	9.3	-82.8	20.2	35.28138	0.743	-85.7	75.8	34.3	42.1	41.4	170.44425	8-9	
10	-8.349	-4.878	2317.92062	-75.4	10.5	-83.7	17.2	37.65265	0.610	-85.3	82.8	30.6	52.6	52.2	211.10257	9-10	
11	-13.162	-3.130	2381.23743	-67.5	14.8	-87.9	23.3	38.79771	0.557	-90.9	84.7	30.5	56.2	53.9	154.75897	10-11	
12	-19.056	0.033	2501.87640	-59.7	20.7	-94.9	29.7	40.67428	0.463	-97.0	87.9	30.7	62.5	56.8	200.84130	11-12	
13	-18.466	-8.872	2299.25525	-55.0	17.4	-88.4	33.1	37.44120	0.625	-96.3	79.5	34.4	51.4	43.3	256.00039	12-13	
14	-18.162	-15.514	2175.43225	-48.7	14.4	-85.0	36.7	35.32475	0.735	-95.8	73.2	38.1	42.9	32.4	191.18697	13-14	
15	-13.111	-16.793	2104.70081	-58.0	10.7	-83.1	30.0	34.29318	0.800	-90.7	71.4	37.9	37.0	32.4	157.48343	14-15	
16	-8.847	-17.608	2065.10983	-68.6	8.1	-82.1	23.4	33.58881	0.840	-86.1	70.3	38.0	33.2	32.0	131.40141	15-16	

JULY 31, 1964 13 HR 10 MIN 37 SEC 519 MS

TAB NO 23

ATLAS PHOTO NO 23

POD SEQUENCE NO 49

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										911.281	1898.38010	-3.687	-34.994	3633.835	1.972	-74.174	116.931
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-12.001	-17.734	2071.41937	-59.7	10.7	-85.3	29.2	35.86274	0.704	-92.5	70.4	38.4	34.8	31.1	0.	0-1	
2	-13.092	-10.801	2202.31451	-63.5	12.7	-84.9	26.5	35.96535	0.699	-90.8	77.2	34.2	45.7	42.3	207.64755	1-2	
3	-10.753	-14.488	2117.34598	-66.0	10.0	-83.1	24.8	34.54046	0.778	-88.2	73.5	36.1	39.0	36.9	130.24645	2-3	
4	-10.623	-8.089	2243.91449	-70.0	11.6	-84.4	21.7	36.59336	0.663	-88.0	79.7	32.3	48.5	47.1	190.49187	3-4	
5	-15.750	-6.262	2318.17502	-61.5	16.1	-88.2	28.1	37.81594	0.600	-93.7	81.8	32.4	53.2	48.5	165.39321	4-5	
6	-15.559	-13.261	2176.12743	-56.4	13.6	-85.0	31.5	35.48800	0.723	-93.4	75.1	36.1	43.7	37.4	204.22036	5-6	
7	-10.753	-14.488	2117.34598	-66.0	10.0	-83.1	24.8	34.54046	0.778	-88.2	73.5	36.1	39.0	36.9	150.01841	6-7	
8	-8.866	-17.605	2055.16925	-68.6	8.1	-82.1	23.5	33.42714	0.840	-86.1	70.3	38.0	33.2	32.0	109.16278	7-8	
9	-8.627	-11.945	2155.02771	-72.6	9.3	-82.8	20.3	35.11103	0.743	-85.7	75.8	34.3	42.1	41.4	169.60233	8-9	
10	-8.371	-4.942	2306.49197	-75.4	10.5	-83.7	17.3	37.46708	0.611	-85.3	82.7	30.6	52.5	52.1	209.90673	9-10	
11	-13.159	-3.205	2369.45486	-67.5	14.7	-87.8	23.3	38.60574	0.558	-90.9	84.6	30.5	56.2	53.8	153.97712	10-11	
12	-19.022	-0.070	2489.14865	-59.7	20.7	-94.9	29.7	40.46740	0.465	-97.0	87.8	30.7	62.4	56.7	199.62807	11-12	
13	-18.439	-8.914	2288.08652	-55.0	17.4	-88.3	33.1	37.25937	0.625	-96.4	79.4	34.4	51.4	43.2	254.28736	12-13	
14	-18.136	-15.520	2164.96777	-48.7	14.4	-85.0	36.7	35.15487	0.736	-95.8	73.2	38.1	42.9	32.4	190.19328	13-14	
15	-13.110	-16.793	2094.60843	-58.0	10.7	-83.1	30.0	34.12874	0.800	-90.7	71.4	37.9	37.0	32.4	156.71194	14-15	
16	-8.866	-17.605	2055.16925	-68.6	8.1	-82.1	23.5	33.42714	0.840	-86.1	70.3	38.0	33.2	32.0	130.78137	15-16	

JULY 31, 1964 13 HR 10 MIN 42 SEC 639 MS

TAB NO 24

ATLAS PHOTO NO 24

POD SEQUENCE NO 51

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										906.161	1888.66479	-3.706	-34.955	3624.120	1.973	-74.144	116.926
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.992	-17.753	2060.97647	-59.7	10.7	-85.3	29.3	35.68984	0.704	-92.5	70.4	38.4	34.8	31.1	0.	0-1	
2	-13.091	-10.831	2191.63977	-63.5	12.7	-84.9	26.5	35.79162	0.699	-90.8	77.2	34.2	45.6	42.2	207.34580	1-2	
3	-10.763	-14.500	2107.11328	-66.0	10.1	-83.1	24.9	34.37354	0.778	-88.2	73.4	36.1	39.0	36.9	129.59571	2-3	
4	-10.633	-8.134	2232.95087	-70.0	11.6	-84.4	21.7	36.41459	0.663	-88.0	79.7	32.3	48.5	47.1	189.48817	3-4	
5	-15.736	-6.318	2306.78787	-61.5	16.1	-88.2	28.1	37.63019	0.600	-93.7	81.7	32.4	53.2	48.5	163.56027	4-5	
6	-15.546	-13.279	2165.61053	-56.4	13.6	-85.0	31.5	35.31649	0.723	-93.4	75.0	36.1	43.7	37.4	203.10037	5-6	
7	-10.763	-14.500	2107.11328	-66.0	10.1	-83.1	24.9	34.37354	0.778	-88.2	73.4	36.1	39.0	36.9	149.29071	6-7	
8	-8.885	-17.602	2045.21715	-68.6	8.1	-82.1	23.5	33.26528	0.840	-86.1	70.3	38.0	33.2	32.0	108.64604	7-8	
9	-8.647	-11.969	2144.55765	-72.6	9.3	-82.8	20.3	34.94047	0.743	-85.7	75.8	34.3	42.1	41.3	168.75920	8-9	
10	-8.392	-5.006	2295.05185	-75.3	10.5	-83.6	17.3	37.28131	0.612	-85.3	82.7	30.6	52.4	52.0	208.71128	9-10	
11	-13.157	-3.280	2357.66055	-67.4	14.7	-87.8	23.3	38.41358	0.559	-90.9	84.5	30.4	56.1	53.8	153.19471	10-11	
12	-18.989	-0.173	2476.41327	-59.7	20.6	-94.8	29.7	40.26038	0.466	-97.0	87.7	30.7	62.3	56.6	198.41706	11-12	
13	-18.411	-8.956	2276.90433	-55.0	17.4	-88.3	33.0	37.07733	0.626	-96.4	79.4	34.4	51.3	43.2	252.57895	12-13	
14	-18.110	-15.527	2154.49026	-48.8	14.3	-85.0	36.7	34.98478	0.736	-95.8	73.2	38.1	42.9	32.4	189.19876	13-14	
15	-13.108	-16.793	2084.50357	-58.0	10.7	-83.1	30.0	33.96409	0.800	-90.7	71.4	37.9	37.0	32.4	155.93955	14-15	
16	-8.885	-17.602	2045.21715	-68.6	8.1	-82.1	23.5	33.26528	0.840	-86.1	70.3	38.0	33.2	32.0	130.16041	15-16	

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 10 MIN 47 SEC 759 MS

TAB NO 25

ATLAS PHOTO NO 25

POD SEQUENCE NO 53

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
PHOTO DATA										901.041	1878.94205	-3.726	-34.916	3614.397	1.975	-74.114	116.921
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.982	-17.771	2050.52417	-59.6	10.7	-85.3	29.3	35.51772	0.704	-92.5	70.4	38.4	34.8	31.0	0.	0-1	
2	-13.090	-10.858	2181.01434	-63.5	12.7	-84.9	26.5	35.61750	0.699	-90.8	77.2	34.2	45.6	42.2	207.12641	1-2	
3	-10.773	-14.509	2096.91562	-66.0	10.1	-83.1	24.9	34.20719	0.778	-88.6	73.4	36.1	39.0	36.9	128.95571	2-3	
4	-10.644	-8.176	2222.04382	-70.0	11.6	-84.4	21.7	36.23673	0.664	-88.0	79.6	32.3	48.5	47.0	188.50102	3-4	
5	-15.721	-6.371	2295.47357	-61.5	16.1	-88.1	28.1	37.44562	0.601	-93.7	81.7	32.3	53.1	48.4	162.73838	4-5	
6	-15.534	-13.293	2155.13773	-56.4	13.6	-85.0	31.5	35.14571	0.724	-93.4	75.0	36.1	43.7	37.4	202.00292	5-6	
7	-10.773	-14.509	2096.91562	-66.0	10.1	-83.1	24.9	34.20719	0.778	-88.2	73.4	36.1	39.0	36.9	148.57114	6-7	
8	-8.905	-17.596	2035.29054	-68.5	8.1	-82.1	23.5	33.10383	0.840	-86.1	70.3	38.0	33.2	32.0	108.13579	7-8	
9	-8.668	-11.991	2134.12814	-72.5	9.4	-82.8	20.4	34.77056	0.743	-85.7	75.8	34.3	42.1	41.3	167.92673	8-9	
10	-8.614	-5.067	2283.68036	-75.3	10.5	-83.6	17.4	37.09665	0.612	-85.3	82.6	30.6	52.4	52.0	207.53860	9-10	
11	-13.155	-3.351	2345.95163	-67.4	14.7	-87.8	23.4	38.22281	0.560	-90.9	84.5	30.4	56.0	53.7	152.42330	10-11	
12	-16.956	-0.271	2463.80173	-59.7	20.5	-94.7	29.7	40.05538	0.468	-97.0	87.6	30.7	62.3	56.5	197.23514	11-12	
13	-18.384	-8.995	2565.78787	-55.0	17.3	-88.3	33.0	36.89635	0.627	-96.4	79.3	34.4	51.3	43.1	250.92086	12-13	
14	-18.085	-15.531	2144.05450	-48.8	14.3	-85.0	36.6	34.81535	0.736	-95.8	73.2	38.1	42.9	32.4	188.22238	13-14	
15	-13.108	-16.790	2074.43033	-58.0	10.7	-83.1	30.0	37.79996	0.800	-90.7	71.4	37.9	37.0	32.4	155.17384	14-15	
16	-8.905	-17.596	2035.29054	-68.5	8.1	-82.1	23.5	33.10363	0.840	-86.1	70.3	38.0	33.2	32.0	129.54297	15-16	

TAB NO 26

ATLAS PHOTO NO 26

POD SEQUENCE NO 55

JULY 31, 1964 13 HR 10 MIN 52 SEC 879 MS

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
PHOTO DATA										879.721	1869.21141	-3.746	-34.877	3604.667	1.977	-74.084	116.915
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.973	-17.789	2040.06218	-59.6	10.7	-85.3	29.3	35.34566	0.705	-92.5	70.3	38.5	34.7	31.0	0.	0-1	
2	-13.090	-10.884	2170.39316	-63.5	12.7	-84.9	26.5	35.44405	0.700	-90.8	77.1	34.2	45.6	42.2	206.92710	1-2	
3	-10.784	-14.517	2086.71884	-65.9	10.1	-83.1	24.9	34.04085	0.778	-88.2	73.4	36.1	39.0	36.9	128.31796	2-3	
4	-10.655	-8.218	2211.14334	-69.9	11.6	-84.4	21.8	36.05897	0.664	-88.0	79.6	32.3	48.4	47.0	187.51789	3-4	
5	-15.521	-13.308	2144.66788	-61.5	16.1	-88.1	28.1	37.26124	0.602	-93.7	81.6	32.4	53.1	48.4	161.91891	4-5	
6	-10.784	-14.517	2086.71884	-65.9	10.1	-83.1	24.9	34.04085	0.778	-88.2	73.4	36.1	43.7	37.4	200.91117	5-6	
7	-8.924	-17.590	2025.36284	-68.5	8.1	-82.1	23.6	32.94236	0.840	-86.1	70.3	38.0	33.2	32.0	107.62669	6-7	
8	-8.688	-12.013	2123.70105	-72.5	9.4	-82.7	20.4	34.60070	0.744	-85.7	75.8	34.3	42.1	41.3	167.09633	7-8	
9	-8.436	-5.128	2272.31961	-75.3	10.5	-83.6	17.4	36.91216	0.613	-85.3	82.6	30.6	52.3	51.9	206.37245	8-9	
10	-13.154	-3.421	2334.25781	-67.4	14.7	-87.7	23.4	38.03228	0.561	-90.9	84.4	30.4	56.0	53.6	151.65440	9-10	
11	-18.924	-0.368	2451.21826	-59.7	20.5	-94.6	29.7	39.85083	0.469	-97.0	87.6	30.7	62.2	56.4	196.06230	10-11	
12	-18.357	-9.034	2254.67996	-55.0	17.3	-88.3	33.0	36.71550	0.627	-96.4	79.3	34.4	51.3	43.1	249.27932	11-12	
13	-18.060	-15.534	2133.62112	-48.8	14.3	-85.0	36.6	34.64596	0.736	-95.8	73.1	38.1	42.8	32.4	187.25034	12-13	
14	-13.107	-16.787	2064.35706	-58.0	10.7	-83.1	30.0	37.63562	0.800	-90.7	71.4	37.9	37.0	32.4	154.40938	13-14	
15	-8.924	-17.590	2025.36284	-68.5	8.1	-82.1	23.6	32.94236	0.840	-86.1	70.3	38.0	33.2	32.0	128.92567	14-15	
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TAB NO 27

ATLAS PHOTO NO 27

POD SEQUENCE NO 57

JULY 31, 1964 13 HR 10 MIN 57 SEC 998 MS

TRAJECTORY DATA						SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
PHOTO DATA						890.801	1859.47351	-3.766	-34.837	3594.929	1.979	-74.054	116.910			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.964	-17.807	2029.59056	-59.6	10.7	-85.2	29.3	35.17337	0.705	-92.5	70.3	38.5	34.7	31.0	0.	0-1
2	-13.089	-10.911	2159.75797	-63.4	12.7	-84.9	26.6	35.27037	0.700	-90.8	77.1	34.2	45.6	42.2	206.72218	1-2
3	-10.795	-14.526	2076.50903	-65.9	10.1	-83.0	24.9	33.87430	0.778	-88.2	73.4	36.1	39.0	36.9	127.67917	2-3
4	-10.666	-8.259	2200.22916	-69.9	11.6	-84.4	21.8	35.88100	0.665	-88.0	79.6	32.3	48.4	46.9	186.53373	3-4
5	-15.694	-6.475	2272.85211	-61.4	16.0	-88.0	28.1	37.07661	0.602	-93.7	81.6	32.4	53.0	48.3	161.09836	4-5
6	-15.509	-13.322	2134.18408	-56.4	13.6	-85.0	31.5	34.80401	0.724	-93.4	75.0	36.1	43.7	37.3	199.81868	5-6
7	-10.795	-14.526	2076.50903	-65.9	10.1	-83.0	24.9	33.87430	0.778	-88.2	73.4	36.1	39.0	36.9	147.13263	6-7
8	-8.944	-17.585	2015.42317	-68.4	8.1	-82.1	23.6	32.78070	0.840	-86.1	70.3	38.0	33.3	32.0	107.11654	7-8
9	-8.709	-12.035	2113.26102	-72.4	9.4	-82.7	20.4	34.43062	0.744	-85.7	75.7	34.3	42.1	41.3	166.26472	8-9
10	-8.457	-5.188	2260.94629	-75.2	10.6	-83.6	17.5	36.72747	0.614	-85.3	82.5	30.6	52.3	51.9	205.20604	9-10
11	-13.152	-3.492	2322.55063	-67.4	14.7	-87.7	23.4	37.84154	0.562	-90.9	84.3	30.4	55.9	53.6	150.88639	10-11
12	-18.892	-0.465	2438.62415	-59.7	20.5	-94.5	29.7	39.64611	0.470	-97.0	87.5	30.7	62.1	56.3	194.89078	11-12
13	-18.329	-9.072	2243.55756	-55.0	17.3	-88.3	33.0	36.53442	0.626	-96.4	79.3	34.4	51.2	43.1	247.64073	12-13
14	-18.035	-15.538	2123.17410	-48.8	14.3	-85.0	36.6	34.47635	0.736	-95.8	73.1	38.1	42.8	32.4	186.27711	13-14
15	-13.107	-16.785	2054.27087	-58.0	10.7	-83.1	30.0	37.47148	0.800	-90.7	71.4	37.9	37.0	32.4	153.64376	14-15
16	-8.944	-17.585	2015.42317	-68.4	8.1	-82.1	23.6	32.78070	0.840	-86.1	70.3	38.0	33.3	32.0	128.30755	15-16

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JULY 31, 1964 13 HR 11 MIN 3 SEC 118 MS TAB NO 28 ATLAS PHOTO NO 28 POD SEQUENCE NO 59

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				885.681	1849.72769	-3.786	-34.797	3585.183	1.981	-74.023	116.905		
PHOTO DATA													
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.955	-17.825	2019.10918	-59.6	10.6	-85.2	29.3	34.99910	0.705	-92.5	70.3 38.5 34.7	31.0	0-1
2	-13.087	-10.943	2149.00238	-63.4	12.7	-84.9	26.6	35.09472	0.700	-90.8	77.1 34.2 45.5	42.1	206.36501 1-2
3	-10.804	-14.539	2065.20581	-65.9	10.1	-83.0	25.0	33.70622	0.778	-88.2	73.4 36.1 39.0	36.8	127.01908 2-3
4	-10.676	-8.306	2189.18561	-69.9	11.7	-84.4	21.8	35.70092	0.665	-88.0	79.5 32.3 48.4	46.9	185.52030 3-4
5	-15.678	-6.534	2261.37338	-61.4	16.0	-88.1	28.1	36.88937	0.603	-93.7	81.5 32.4 53.0	48.2	160.25521 4-5
6	-15.494	-13.341	2123.58597	-56.4	13.6	-85.0	31.5	34.63119	0.724	-93.4	75.0 36.1 43.7	37.3	198.68741 5-6
7	-10.804	-14.539	2065.20581	-65.9	10.1	-83.0	25.0	33.70622	0.778	-88.2	73.4 36.1 39.0	36.8	146.39848 6-7
8	-8.962	-17.583	2005.40913	-68.4	8.1	-82.0	23.6	32.61763	0.839	-86.1	70.3 38.0 33.3	32.0	106.59258 7-8
9	-8.728	-12.061	2102.72046	-72.4	9.4	-82.7	20.5	34.25891	0.744	-85.7	75.7 34.3 42.0	41.3	165.41315 8-9
10	8.478	-5.254	2249.42923	-75.2	10.6	-83.6	17.5	36.54046	0.615	-85.3	82.4 30.6 52.2	51.8	204.00315 9-10
11	-13.147	-3.569	2310.66800	-67.3	14.7	-87.7	23.4	36.64794	0.563	-90.9	84.3 30.4 55.8	53.5	150.09278 10-11
12	-18.857	-0.570	2425.79584	-59.7	20.5	-94.4	29.7	39.43758	0.472	-97.0	87.4 30.7 62.0	56.2	193.67733 11-12
13	-18.300	-4.116	2282.28320	-55.0	17.3	-88.2	33.0	36.35067	0.628	-96.4	79.2 34.4 51.2	43.0	245.92995 12-13
14	-18.008	-15.547	2112.61639	-48.8	14.3	-85.0	36.6	34.30496	0.736	-95.8	73.1 38.1 42.8	32.4	185.27065 13-14
15	-13.104	-16.786	2044.09566	-58.0	10.7	-83.1	30.0	33.30569	0.800	-90.7	71.4 37.9 37.0	32.4	152.86250 14-15
16	-8.962	-17.583	2005.40913	-68.4	8.1	-82.0	23.6	32.61763	0.839	-86.1	70.3 38.0 33.3	32.0	127.68034 15-16

JULY 31, 1964 13 HR 11 MIN 8 SEC 238 MS TAB NO 29 ATLAS PHOTO NO 29 POD SEQUENCE NO 61

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				880.561	1839.97397	-3.806	-34.757	3575.429	1.983	-73.993	116.900		
PHOTO DATA													
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.946	-17.844	2008.61781	-59.6	10.6	-85.2	29.3	34.82430	0.705	-92.5	70.3 38.5 34.6	30.9	0-1
2	-13.084	-10.976	2138.71411	-63.4	12.7	-84.9	26.6	34.91854	0.701	-90.8	77.1 34.2 45.5	42.1	205.97675 1-2
3	-10.812	-14.552	2055.87527	-65.9	10.1	-83.0	25.0	33.53770	0.778	-88.2	73.4 36.1 39.0	36.8	126.35449 2-3
4	-10.685	-8.354	2178.10822	-69.8	11.7	-84.4	21.9	35.52029	0.666	-88.0	79.5 32.3 48.3	46.9	184.50114 3-4
5	-15.661	-6.594	2249.85504	-61.4	16.0	-88.0	28.1	36.70148	0.604	-93.7	81.5 32.4 52.9	48.2	159.40759 4-5
6	-15.480	-13.362	2112.95627	-56.4	13.5	-85.0	31.5	34.45786	0.724	-93.4	75.0 36.1 43.6	37.3	197.54907 5-6
7	-10.812	-14.552	2055.87527	-65.9	10.1	-83.0	25.0	33.53770	0.778	-88.2	73.4 36.1 39.0	36.8	145.66093 6-7
8	-8.980	-17.582	1995.37193	-68.4	8.2	-82.0	23.7	32.45459	0.839	-86.1	70.3 38.0 33.3	32.0	106.06534 7-8
9	-8.747	-12.088	2092.15143	-72.4	9.4	-82.7	20.5	34.08674	0.744	-85.7	75.7 34.3 42.0	41.2	164.55710 8-9
10	-8.498	-5.321	2237.87689	-75.1	10.6	-83.6	17.6	36.35289	0.616	-85.3	82.4 30.6 52.2	51.7	202.79399 9-10
11	-13.145	-3.647	2296.74438	-67.3	14.7	-87.6	23.5	37.45367	0.564	-90.9	84.2 30.4 55.8	53.4	149.29676 10-11
12	-18.822	-0.677	2412.91989	-59.7	20.4	-94.3	29.7	39.22828	0.474	-97.0	87.3 30.7 61.9	56.0	192.45091 11-12
13	-18.270	-4.162	2220.97055	-55.0	17.2	-88.2	33.0	36.16670	0.629	-96.4	79.2 34.4 51.1	43.0	244.21059 12-13
14	-17.980	-15.556	2102.02794	-48.9	14.3	-85.0	36.5	34.13307	0.737	-95.8	73.1 38.1 42.8	32.4	184.25769 13-14
15	-13.102	-16.788	2033.89392	-58.0	10.7	-83.1	30.0	33.13947	0.800	-90.8	71.4 37.9 37.0	32.4	152.07774 14-15
16	-8.980	-17.582	1995.37193	-68.4	8.2	-82.0	23.7	32.45459	0.839	-86.1	70.3 38.0 33.3	32.0	127.05079 15-16

JULY 31, 1964 13 HR 11 MIN 13 SEC 358 MS TAB NO 30 ATLAS PHOTO NO 30 POD SEQUENCE NO 63

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				875.441	1830.21262	-3.827	-34.717	3565.668	1.985	-73.962	116.895		
PHOTO DATA													
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.937	-17.862	1998.11685	-59.6	10.6	-85.2	29.3	34.44928	0.706	-92.5	70.3 38.5 34.6	30.9	0-1
2	-13.081	-11.009	2127.41327	-63.4	12.7	-84.8	26.6	34.74216	0.701	-90.8	77.0 34.2 45.5	42.1	205.58462 1-2
3	-10.821	-14.566	2045.53264	-65.8	10.1	-83.0	25.0	33.36899	0.778	-88.2	73.4 36.1 39.0	36.8	125.68908 2-3
4	-10.694	-8.402	2167.01889	-69.8	11.7	-84.3	21.9	35.33946	0.666	-88.0	79.4 32.3 48.3	46.8	183.48148 3-4
5	-15.645	-6.653	2238.42474	-61.4	16.0	-88.0	28.1	36.51339	0.605	-93.7	81.4 32.4 52.8	48.1	158.55913 4-5
6	-15.465	-13.382	2102.31384	-56.4	13.5	-85.0	31.4	34.28432	0.725	-93.4	74.9 36.1 43.6	37.3	196.41075 5-6
7	-10.821	-14.566	2045.53264	-65.8	10.1	-83.0	25.0	33.36899	0.778	-88.2	73.4 36.1 39.0	36.8	144.92237 6-7
8	-8.999	-17.581	1985.32339	-68.3	8.2	-82.0	23.7	32.29116	0.839	-86.1	70.3 38.0 33.3	32.0	105.53729 7-8
9	-8.766	-12.116	2081.57053	-72.3	9.4	-82.7	20.6	36.91437	0.744	-85.7	75.7 34.3 42.0	41.2	163.70014 8-9
10	-8.518	-5.388	2226.31415	-75.1	10.6	-83.5	17.6	36.16514	0.616	-85.3	82.3 30.6 52.1	51.7	201.58556 9-10
11	-13.141	-3.726	2286.81039	-67.3	14.7	-87.6	23.5	37.25924	0.565	-90.9	84.1 30.4 55.7	53.3	148.50020 10-11
12	-18.786	-0.784	2400.03836	-59.7	20.4	-94.2	29.7	39.01888	0.475	-97.0	87.2 30.7 61.8	55.9	191.23091 11-12
13	-18.241	-4.208	2209.64539	-55.0	17.2	-88.2	33.0	35.98233	0.630	-96.4	79.2 34.4 51.1	42.9	242.49695 12-13
14	-17.953	-15.566	2091.42700	-48.9	14.2	-85.0	36.5	33.96098	0.737	-95.8	73.1 38.1 42.8	32.3	183.24414 13-14
15	-13.099	-16.791	2023.68008	-58.0	10.7	-83.1	30.0	32.97305	0.800	-90.8	71.4 37.9 37.0	32.4	151.29222 14-15
16	-8.998	-17.581	1985.32339	-68.3	8.2	-82.0	23.7	32.29116	0.839	-86.1	70.3 38.0 33.3	32.0	126.42004 15-16

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JULY 31, 1964 13 HR 11 MIN 18 SEC 478 MS

TAB NO 31

ATLAS PHOTO NO 31

POD SEQUENCE NO 65

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.928	-17.880	1987.60597	-59.6	10.6	-85.2	29.3	34.47455	0.706	-92.5	70.2	38.5	34.6	30.9	0-1
2	-13.079	-11.040	2116.63281	-63.4	12.7	-84.8	26.6	34.56611	0.701	-90.8	77.0	34.2	45.5	42.0	205.23578
3	-10.830	-14.579	2035.20386	-65.8	10.1	-83.0	25.0	33.20049	0.778	-88.2	73.4	36.1	39.0	36.8	125.02856
4	-10.704	-8.448	2155.95746	-69.8	11.7	-84.3	21.9	35.15909	0.667	-86.0	79.4	32.3	48.2	46.8	182.47228
5	-15.629	-6.712	2226.82639	-61.4	16.0	-88.0	28.1	36.32582	0.605	-93.7	81.4	32.4	52.8	48.1	157.71438
6	-15.450	-13.401	2091.68622	-56.4	13.5	-85.0	31.4	34.11102	0.725	-93.4	74.9	36.1	43.6	37.3	195.28557
7	-10.830	-14.579	2035.20386	-65.8	10.1	-83.0	25.0	33.20049	0.778	-88.2	73.4	36.1	39.0	36.8	144.18501
8	-9.016	-17.578	1975.28452	-68.3	8.2	-82.0	23.7	32.12788	0.839	-86.1	70.3	38.0	33.3	32.0	105.01205
9	-8.785	-12.141	2071.00934	-72.3	9.4	-82.7	20.6	33.74233	0.745	-85.7	75.6	34.3	42.0	41.2	162.84987
10	-8.539	-5.454	2214.79025	-75.1	10.6	-83.5	17.7	35.97802	0.617	-85.3	82.2	30.6	52.1	51.6	200.39239
11	-13.138	-3.802	2274.91986	-67.3	14.7	-87.6	23.5	37.06551	0.566	-90.9	84.0	30.4	55.6	53.2	147.70779
12	-18.751	-0.888	2387.21591	-59.7	20.3	-94.2	29.7	38.81045	0.477	-97.0	87.1	30.7	61.7	55.8	190.02330
13	-18.211	-9.252	2198.34448	-55.0	17.2	-88.2	33.0	35.79835	0.630	-96.4	79.1	34.4	51.0	42.9	240.61281
14	-17.925	-15.574	2080.83652	-48.9	14.2	-85.0	36.5	33.78906	0.737	-95.8	73.1	38.1	42.7	32.3	182.24047
15	-13.096	-16.792	2013.47563	-58.0	10.7	-83.1	30.0	32.80678	0.800	-90.8	71.4	37.9	37.0	32.4	150.50751
16	-9.016	-17.578	1975.28452	-68.3	8.2	-82.0	23.7	32.12788	0.839	-86.1	70.3	38.0	33.3	32.0	125.79003

TAB NO 32

ATLAS PHOTO NO 32

POD SEQUENCE NO 67

JULY 31, 1964 13 HR 11 MIN 23 SEC 598 MS

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.919	-17.899	1977.08510	-59.6	10.6	-85.2	29.3	34.29963	0.706	-92.5	70.2	38.5	34.5	30.8	0-1
2	-13.076	-11.072	2105.84195	-63.4	12.7	-84.8	26.6	34.38988	0.702	-90.8	77.0	34.2	45.4	42.0	204.88666
3	-10.839	-14.592	2024.86470	-65.8	10.1	-83.0	25.1	33.03183	0.778	-88.2	73.4	36.1	39.0	36.8	124.36768
4	-10.713	-8.494	2144.88681	-69.7	11.7	-84.3	22.0	34.97857	0.667	-88.0	79.3	32.3	48.2	46.7	181.46342
5	-15.612	-6.770	2215.31203	-61.4	15.9	-88.0	28.1	36.33811	0.606	-93.7	81.3	32.4	52.7	48.0	156.86920
6	-15.435	-13.421	2081.04767	-56.4	13.5	-85.0	31.4	34.13811	0.725	-93.4	74.9	36.1	43.6	37.3	194.16135
7	-10.839	-14.592	2024.86470	-65.8	10.1	-83.0	25.1	33.03183	0.778	-88.2	73.4	36.1	39.0	36.8	143.44695
8	-9.034	-17.576	1965.23564	-68.3	8.2	-82.0	23.8	31.96444	0.835	-86.1	70.3	38.0	33.3	32.0	104.48620
9	-8.804	-12.167	2060.43835	-72.2	9.4	-82.7	20.6	33.57012	0.745	-85.7	75.6	34.3	42.0	41.2	161.99925
10	-8.559	-5.519	2203.25928	-75.0	10.6	-83.5	17.7	35.79078	0.618	-85.3	82.2	30.6	52.0	51.5	199.20088
11	-13.134	-3.879	2263.02258	-67.3	14.7	-87.6	23.5	36.87168	0.567	-90.9	84.0	30.4	55.6	53.2	146.91512
12	-18.717	-0.992	2374.39182	-59.7	20.3	-94.1	29.7	38.60199	0.478	-97.0	87.0	30.7	61.6	55.7	188.81889
13	-18.181	-9.297	2187.03363	-55.0	17.1	-88.2	33.0	35.61420	0.631	-96.4	79.1	34.4	51.0	42.8	239.13548
14	-17.897	-15.583	2070.23489	-48.9	14.2	-85.0	36.4	33.61696	0.737	-95.8	73.1	38.1	42.7	32.3	181.23707
15	-13.094	-16.793	2003.26044	-58.0	10.7	-83.1	30.0	32.64034	0.800	-90.8	71.4	37.9	37.0	32.4	149.72219
16	-9.034	-17.576	1965.23564	-68.3	8.2	-82.0	23.8	31.96444	0.839	-86.1	70.3	38.0	33.3	32.0	125.15911

TAB NO 33

ATLAS PHOTO NO 33

POD SEQUENCE NO 69

JULY 31, 1964 13 HR 11 MIN 28 SEC 718 MS

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.910	-17.917	1966.55449	-59.6	10.6	-85.2	29.3	34.12449	0.706	-92.5	70.2	38.5	34.5	30.8	0-1
2	-13.073	-11.104	2095.03772	-63.4	12.7	-84.8	26.6	34.21344	0.702	-90.8	76.9	34.2	45.4	42.0	204.53270
3	-10.847	-14.604	2014.51276	-65.8	10.1	-83.0	25.1	32.86296	0.778	-88.2	73.4	36.1	39.0	36.8	123.70599
4	-10.722	-8.541	2133.80304	-69.7	11.7	-84.3	22.0	34.79783	0.668	-88.0	79.3	32.3	48.2	46.7	180.45371
5	-15.596	-6.828	2203.79846	-61.4	15.9	-87.9	26.2	35.95018	0.607	-93.7	81.2	32.4	52.7	47.9	156.02318
6	-15.420	-13.440	2070.39572	-56.4	13.5	-85.0	31.4	33.76383	0.725	-93.4	74.9	36.1	43.6	37.2	193.03669
7	-10.847	-14.604	2014.51276	-65.8	10.1	-83.0	25.1	32.86296	0.778	-88.2	73.4	36.1	39.0	36.8	142.70780
8	-9.051	-17.574	1955.17485	-68.2	8.2	-82.0	23.8	31.80081	0.839	-86.1	70.3	38.0	33.3	32.0	103.95944
9	-8.823	-12.193	2049.85474	-72.2	9.5	-82.7	20.7	33.39771	0.745	-85.8	75.6	34.3	41.9	41.1	161.14748
10	-8.579	-5.584	2191.71658	-75.0	10.6	-83.5	17.8	35.60335	0.619	-85.3	82.1	30.5	51.9	51.5	198.00973
11	-13.131	-3.955	2251.11340	-67.2	14.7	-87.5	23.6	36.67764	0.568	-90.9	83.9	30.4	55.5	53.1	146.12182
12	-18.682	-1.096	2361.55997	-59.7	20.2	-94.0	29.7	38.39340	0.480	-97.1	86.9	30.7	61.5	55.6	187.61678
13	-18.152	-9.341	2175.70926	-55.0	17.1	-88.1	32.9	35.42984	0.632	-96.4	79.0	34.4	50.9	42.8	237.46276
14	-17.869	-15.591	2059.62021	-49.0	14.2	-85.0	36.4	33.44464	0.738	-95.8	73.1	38.1	42.7	32.3	180.23278
15	-13.091	-16.795	1993.03256	-58.0	10.7	-83.1	30.0	32.47369	0.800	-90.8	71.4	37.9	37.0	32.4	148.93591
16	-9.051	-17.574	1955.17485	-68.2	8.2	-82.0	23.8	31.80081	0.839	-86.1	70.3	38.0	33.3	32.0	124.52728

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JULY 31, 1964 13 HR 11 MIN 33 SEC 838 MS TAB NO 34 ATLAS PHOTO NO 34 POD SEQUENCE NO 71

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
PHOTO DATA										854.962	1791.08844	-3.909	-34.554	3526.544	1.992	-73.838	116.873
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.901	-17.936	1956.01361	-59.6	10.6	-85.2	29.3	33.94912	0.707	-92.5	70.2	38.6	34.4	30.8	0.	0-1	
2	-13.070	-11.136	2084.21970	-63.3	12.7	-84.8	26.7	34.03678	0.702	-90.8	76.9	34.2	45.4	42.0	204.17417	1-2	
3	-10.856	-14.617	2004.14777	-65.8	10.1	-83.0	25.1	32.69388	0.778	-88.2	73.3	36.0	39.0	36.8	123.04339	2-3	
4	-10.731	-8.588	2122.70612	-69.7	11.7	-84.3	22.0	34.61688	0.668	-88.0	79.3	32.3	48.1	46.6	179.44334	3-4	
5	-15.580	-6.887	2192.26468	-61.4	15.9	-87.9	28.2	35.76204	0.608	-93.7	81.2	32.4	52.6	47.9	155.17648	4-5	
6	-15.405	-13.460	2059.73007	-56.4	13.5	-85.0	31.4	33.58991	0.726	-93.4	74.9	36.1	43.5	37.2	191.91186	5-6	
7	-10.856	-14.617	2004.14777	-65.8	10.1	-83.0	25.1	32.69388	0.778	-88.2	73.3	36.0	39.0	36.8	141.96756	6-7	
8	-9.069	-17.572	1945.10185	-68.2	8.2	-82.0	23.8	31.63699	0.839	-86.1	70.3	38.0	33.3	32.0	103.43173	7-8	
9	-8.842	-12.219	2039.25821	-72.2	9.5	-82.7	20.7	33.22509	0.745	-85.8	75.6	34.3	41.9	41.1	160.29476	8-9	
10	-8.599	-5.650	2180.16146	-74.9	10.6	-83.5	17.8	35.41573	0.620	-85.3	82.0	30.5	51.9	51.4	196.81876	9-10	
11	-13.127	-4.032	2239.19244	-67.2	14.6	-87.5	23.6	36.48342	0.569	-90.9	83.8	30.4	55.4	53.0	145.32803	10-11	
12	-18.647	-1.200	2348.72052	-59.7	20.2	-93.9	29.7	38.18468	0.481	-97.1	86.8	30.7	61.4	55.5	186.41702	11-12	
13	-18.122	-9.386	2164.37134	-55.0	17.1	-88.1	32.9	35.24525	0.632	-96.4	79.0	34.4	50.9	42.7	235.79473	12-13	
14	-17.841	-15.600	2048.99219	-49.0	14.2	-85.0	36.4	33.72211	0.738	-95.8	73.1	38.1	42.7	32.3	179.22770	13-14	
15	-13.088	-16.796	1982.79170	-58.0	10.7	-83.1	30.0	32.30683	0.800	-90.8	71.4	37.9	37.0	32.4	148.14869	14-15	
16	-9.069	-17.572	1945.10185	-68.2	8.2	-82.0	23.8	31.63699	0.839	-86.1	70.3	38.0	33.3	32.0	123.89445	15-16	

JULY 31, 1964 13 HR 11 MIN 38 SEC 958 MS TAB NO 35 ATLAS PHOTO NO 35 POD SEQUENCE NO 73

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				849.842		1781.28745		-3.930		-34.513		3516.743		1.994		-73.806		116.868	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
1	-11.892	-17.954	1945.46268	-59.6	10.6	-85.2	29.3	33.77351	0.707	-92.5	70.2	38.6	34.4	30.7	0.	0-1			
2	-13.067	-11.168	2073.38785	-63.3	12.7	-84.8	26.7	33.85989	0.703	-90.8	76.9	34.2	45.4	41.9	203.81052	1-2			
3	-10.864	-14.630	1993.76958	-65.7	10.1	-83.0	25.1	32.52458	0.778	-88.2	73.3	36.0	39.0	36.8	122.37987	2-3			
4	-10.741	-8.635	2111.59567	-69.7	11.7	-84.3	22.0	34.43571	0.669	-88.0	79.2	32.3	48.1	46.6	178.43221	3-4			
5	-15.563	-6.946	2180.71725	-61.4	15.9	-87.9	28.2	35.57367	0.608	-93.7	81.1	32.4	52.6	47.8	154.32891	4-5			
6	-15.390	-13.479	2049.05057	-56.4	13.5	-85.0	31.4	33.41577	0.726	-93.4	74.8	36.1	43.5	37.2	190.78663	5-6			
7	-10.864	-14.630	1993.76958	-65.7	10.1	-83.0	25.1	32.52458	0.778	-88.2	73.3	36.0	39.0	36.8	141.22631	6-7			
8	-9.087	-17.570	1935.01653	-68.2	8.2	-82.0	23.8	31.47295	0.839	-86.1	70.3	38.0	33.3	32.0	102.90312	7-8			
9	-8.861	-12.246	2028.64854	-72.1	9.5	-82.7	20.8	33.05225	0.745	-85.8	75.5	34.3	41.9	41.1	159.44082	8-9			
10	-8.620	-5.716	2168.59515	-74.9	10.7	-83.5	17.9	35.22791	0.620	-85.3	82.0	30.5	51.8	51.4	195.62809	9-10			
11	-13.123	-4.109	2227.25906	-67.2	14.6	-87.4	23.6	36.28900	0.570	-90.9	83.7	30.4	55.4	52.9	144.52343	10-11			
12	-18.611	-1.304	2335.87271	-59.7	20.1	-93.8	29.7	37.97583	0.483	-97.1	86.7	30.7	61.3	55.4	185.21943	11-12			
13	-18.092	-9.431	2153.01956	-55.0	17.0	-88.1	32.9	35.06044	0.633	-96.4	78.9	34.4	50.8	42.7	234.13110	12-13			
14	-17.813	-15.609	2038.35060	-49.0	14.2	-85.0	36.3	33.09935	0.738	-95.8	73.1	38.1	42.7	32.3	178.22179	13-14			
15	-13.085	-16.798	1972.53773	-58.0	10.7	-83.1	30.0	32.13975	0.800	-90.8	71.4	37.9	37.0	32.4	147.36059	14-15			
16	-9.087	-17.570	1935.01653	-68.2	8.2	-82.0	23.8	31.47295	0.839	-86.1	70.3	38.0	33.3	32.0	123.26063	15-16			

JULY 31, 1964 13 HR 11 MIN 44 SEC 78 MS TAB NO 36 ATLAS PHOTO NO 36 POD SEQUENCE NO 75

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ		
				844.722			1771.47858		-3.551		-34.471		3506.934		1.996		-73.775		116.863		
PHOTO DATA																					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-11.883	-17.972	1934.90178	-59.6	10.6	-85.2	29.3	33.59768	0.707	-92.5	70.2	38.6	34.4	30.7	0.	0-1					
2	-13.064	-11.200	2062.54266	-63.3	12.7	-84.8	26.7	33.68278	0.703	-90.8	76.8	34.2	45.3	41.9	203.44208	1-2					
3	-10.873	-14.644	1983.37851	-65.7	10.1	-83.0	25.1	32.35507	0.778	-88.2	73.3	36.0	39.0	36.8	121.71559	2-3					
4	-10.750	-8.682	2100.47214	-69.6	11.7	-84.3	22.1	34.25432	0.669	-88.0	79.2	32.3	48.0	46.5	177.42031	3-4					
5	-15.547	-7.005	2169.15707	-61.4	15.8	-87.9	28.2	35.38510	0.609	-93.8	81.1	32.4	52.5	47.8	153.48084	4-5					
6	-15.375	-13.499	2038.35802	-56.4	13.5	-85.0	31.4	33.24140	0.726	-93.4	74.8	36.1	43.5	37.2	189.66113	5-6					
7	-10.873	-14.644	1983.37851	-65.7	10.1	-83.0	25.1	32.35507	0.778	-88.2	73.3	36.0	39.0	36.8	140.48420	6-7					
8	-9.104	-17.568	1924.91913	-68.1	8.2	-82.0	23.9	31.30873	0.839	-86.1	70.3	38.0	33.3	32.0	102.37363	7-8					
9	-8.880	-12.272	2018.02596	-72.1	9.5	-82.6	20.8	32.87920	0.746	-85.8	75.5	34.3	41.9	41.1	158.58578	8-9					
10	-8.640	-5.782	2157.01611	-74.9	10.7	-83.5	17.9	35.03969	0.621	-85.3	81.9	30.5	51.8	51.3	194.43744	9-10					
11	-13.119	-4.186	2215.31400	-67.2	14.6	-87.4	23.6	36.09438	0.571	-90.9	83.7	30.4	55.3	52.9	143.73831	10-11					
12	-18.576	-1.408	2323.01788	-59.7	20.1	-93.7	29.7	37.76687	0.485	-97.1	86.6	30.7	61.2	55.2	184.02462	11-12					
13	-18.062	-9.476	2141.65503	-55.0	17.0	-88.1	32.9	34.87542	0.634	-96.4	78.9	34.4	50.8	42.6	232.47202	12-13					
14	-17.785	-15.618	2027.69650	-49.1	14.1	-85.0	36.3	32.92640	0.738	-95.8	73.0	38.1	42.7	32.3	177.21520	13-14					
15	-13.082	-16.800	1962.27129	-58.0	10.7	-83.2	30.0	31.97248	0.800	-90.8	71.4	37.9	37.0	32.4	146.57164	14-15					
16	-9.104	-17.568	1924.91913	-68.1	8.2	-82.0	23.9	31.30873	0.839	-86.1	70.3	38.0	33.3	32.0	122.62616	15-16					

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 11 MIN 49 SEC 197 MS

TAB NO 37

ATLAS PHOTO NO 37

POD SEQUENCE NO 77

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				839.602	1761.66162	-3.972	-34.429	3497.117	1.998	-73.743	116.857
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.873	-17.991	1924.33069	-59.6	10.6	-85.2	29.3	33.42179	0.707	-92.5	70.1 38.6 34.3 30.7 0 0-1
2	-13.062	-11.233	2051.69162	-63.3	12.7	-84.8	26.7	33.50557	0.703	-90.8	76.8 34.2 45.3 41.9 203.07746 1-2
3	-10.882	-14.657	1972.97896	-65.7	10.1	-83.0	25.2	32.18543	0.778	-88.2	73.3 36.0 39.0 36.7 121.05285 2-3
4	-10.759	-8.729	2089.33838	-69.6	11.7	-84.2	22.1	34.07277	0.670	-88.1	79.1 32.3 48.0 46.5 176.40692 3-4
5	-15.530	-7.064	2157.59644	-61.4	15.8	-87.8	28.2	35.19651	0.610	-93.8	81.0 32.4 52.5 47.7 152.63694 4-5
6	-15.360	-13.519	2027.66409	-56.4	13.4	-85.0	31.4	32.06702	0.726	-93.4	74.8 36.1 43.5 37.2 188.53628 5-6
7	-10.882	-14.657	1972.97896	-65.7	10.1	-83.0	25.2	32.18543	0.778	-88.2	73.3 36.0 39.0 36.7 139.74468 6-7
8	-9.122	-17.567	1914.81192	-68.1	8.2	-82.0	23.9	31.14434	0.839	-86.1	70.3 38.0 33.4 32.0 101.84447 7-8
9	-8.899	-12.299	2007.39111	-72.1	9.5	-82.6	20.8	32.70596	0.746	-85.8	75.5 34.3 41.9 41.1 157.72873 8-9
10	-8.660	-5.848	2145.42322	-74.8	10.7	-83.4	18.0	34.85164	0.622	-85.3	81.9 30.5 51.7 51.2 193.24516 9-10
11	-13.116	-4.263	2203.36432	-67.2	14.6	-87.4	23.7	35.89969	0.572	-90.9	83.6 30.4 55.2 52.8 142.94652 10-11
12	-18.541	-1.512	2310.17700	-59.7	20.0	-93.7	29.7	37.55814	0.486	-97.1	86.5 30.7 61.1 55.1 182.84119 11-12
13	-18.032	-0.520	2130.29504	-55.1	17.0	-88.1	32.9	34.69048	0.634	-96.4	78.8 34.4 50.7 42.6 230.82108 12-13
14	-17.757	-15.627	2017.04596	-49.1	14.1	-85.0	36.3	32.75349	0.738	-95.8	73.0 38.1 42.6 32.3 176.20947 13-14
15	-13.079	-16.801	1952.00035	-58.0	10.7	-83.2	30.0	31.80512	0.800	-90.8	71.4 37.9 37.0 32.4 145.78634 14-15
16	-9.122	-17.567	1914.81192	-68.1	8.2	-82.0	23.9	31.14434	0.839	-86.1	70.3 38.0 33.4 32.0 121.99272 15-16

JULY 31, 1964 13 HR 11 MIN 54 SEC 317 MS

TAB NO 38

ATLAS PHOTO NO 38

POD SEQUENCE NO 79

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				839.602	1761.66162	-3.972	-34.429	3497.117	1.998	-73.743	116.857
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.864	-18.009	1913.74939	-59.6	10.6	-85.2	29.3	33.24566	0.706	-92.5	70.1 38.6 34.3 30.7 0 0-1
2	-13.059	-11.265	2040.62607	-63.3	12.6	-84.8	26.7	33.32813	0.704	-90.8	76.8 34.2 45.3 41.8 202.70688 1-2
3	-10.891	-14.671	1962.56560	-65.7	10.1	-83.0	25.2	32.01556	0.775	-88.2	73.3 36.0 38.9 36.7 120.38915 2-3
4	-10.768	-8.776	2078.19052	-69.6	11.7	-84.2	22.2	33.89099	0.670	-88.1	79.1 32.3 48.0 46.4 175.39270 3-4
5	-15.514	-7.123	2146.02136	-61.4	15.8	-87.8	28.2	35.00770	0.611	-93.8	81.0 32.4 52.4 47.6 151.79199 4-5
6	-15.346	-13.539	2016.95963	-56.5	13.4	-85.0	31.4	32.89240	0.727	-93.4	74.8 36.1 43.5 37.1 187.41099 5-6
7	-10.891	-14.671	1962.56560	-65.7	10.1	-83.0	25.2	32.01556	0.775	-88.2	73.3 36.0 38.9 36.7 139.00403 6-7
8	-9.141	-17.565	1904.69188	-68.1	8.3	-82.0	23.9	32.53249	0.746	-85.8	75.5 34.3 41.9 41.0 156.87056 8-9
9	-8.918	-12.326	1996.74258	-72.0	9.5	-82.6	20.9	34.66318	0.623	-85.3	81.8 30.5 51.6 51.2 192.05304 9-10
10	-8.681	-5.914	2133.81744	-74.8	10.7	-83.4	18.0	35.70478	0.573	-90.9	83.5 30.4 55.1 52.7 142.15392 10-11
11	-13.112	-4.340	2191.40155	-67.1	14.6	-87.3	23.7	37.34924	0.488	-97.1	86.4 30.7 61.0 55.0 181.65955 11-12
12	-18.507	-1.615	2297.32642	-59.7	20.0	-93.6	29.7	34.50529	0.635	-96.4	78.8 34.4 50.7 42.6 229.17424 12-13
13	-18.002	-0.565	2118.92020	-55.1	16.9	-88.1	32.9	32.58036	0.739	-95.8	73.0 38.1 42.6 32.3 175.20271 13-14
14	-17.730	-15.636	2006.38109	-49.1	14.1	-85.0	36.3	31.63755	0.800	-90.8	71.4 37.9 37.0 32.4 144.99983 14-15
15	-13.077	-16.803	1941.71573	-58.0	10.7	-83.2	30.0	30.97975	0.838	-86.1	70.3 38.0 33.4 32.0 121.35848 15-16

JULY 31, 1964 13 HR 11 MIN 59 SEC 437 MS

TAB NO 39

ATLAS PHOTO NO 39

POD SEQUENCE NO 81

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				829.362	1742.00330	-4.015	-34.345	3477.459	2.002	-73.679	116.846
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.855	-18.028	1903.15779	-59.6	10.6	-85.2	29.3	33.06910	0.708	-92.5	70.1 38.6 34.3 30.6 0 0-1
2	-13.056	-11.299	2029.93494	-63.3	12.6	-84.8	26.7	33.15027	0.704	-90.8	76.8 34.2 45.3 41.8 202.31438 1-2
3	-10.900	-14.685	1952.12991	-65.6	10.1	-83.0	25.2	31.84532	0.779	-88.2	73.3 36.0 38.9 36.7 119.72250 2-3
4	-10.778	-8.825	2067.01575	-69.5	11.7	-84.2	22.2	33.70877	0.671	-88.1	79.0 32.3 47.9 46.4 174.37426 3-4
5	-15.498	-7.182	2134.41727	-61.3	15.8	-87.8	28.2	34.81841	0.611	-93.8	80.9 32.4 52.4 47.6 150.94450 4-5
6	-15.331	-13.560	2006.22318	-56.5	13.4	-85.0	31.4	32.71739	0.727	-93.4	74.8 36.1 43.4 37.1 186.28098 5-6
7	-10.900	-14.685	1952.12991	-65.6	10.1	-83.0	25.2	31.84532	0.779	-88.2	73.3 36.0 38.9 36.7 138.26130 6-7
8	-9.159	-17.565	1894.55217	-68.0	8.3	-82.0	24.0	30.81484	0.838	-86.1	70.3 38.0 33.4 32.0 100.78202 7-8
9	-8.938	-12.354	1986.07030	-72.0	9.5	-82.6	20.9	32.35863	0.746	-85.8	75.4 34.3 41.8 41.0 156.00875 8-9
10	-8.701	-5.982	2122.18344	-74.7	10.7	-83.4	18.1	34.47426	0.624	-85.3	81.7 30.5 51.6 51.1 190.85669 9-10
11	-13.108	-4.418	2179.40836	-67.1	14.6	-87.3	23.7	35.50938	0.574	-90.9	83.4 30.4 55.1 52.6 141.35901 10-11
12	-18.472	-1.719	2284.44504	-59.7	19.9	-93.5	29.7	37.13985	0.489	-97.1	86.3 30.7 60.9 54.9 180.47629 11-12
13	-17.972	-9.611	2107.51816	-55.1	16.9	-88.0	32.9	34.31966	0.635	-96.4	78.8 34.4 50.6 42.5 227.52381 12-13
14	-17.702	-15.646	1995.69382	-49.1	14.1	-85.0	36.2	32.40686	0.739	-95.8	73.0 38.1 42.6 32.3 174.19173 13-14
15	-13.074	-16.806	1931.41013	-58.0	10.7	-83.2	30.0	31.46963	0.800	-90.8	71.4 37.9 37.0 32.4 144.21163 14-15
16	-9.159	-17.565	1894.55217	-68.0	8.3	-82.0	24.0	30.81484	0.838	-86.1	70.3 38.0 33.4 32.0 120.72248 15-16

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JULY 31, 1964 13 HR 12 MIN 4 SEC 557 MS

TAB NO 40 ATLAS PHOTO NO 40 POD SEQUENCE NO 83

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										824.242	1732.16187	-4.036	-34.302	3467.617	2.004	-73.647	116.841
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.846	-18.046	1892.55591	-59.5	10.6	-85.2	29.3	32.89106	0.708	-92.5	70.1	38.6	34.2	30.6	0.	0-1	
2	-13.054	-11.336	2018.94891	-63.3	12.6	-84.7	26.8	32.97086	0.704	-90.9	76.7	34.2	45.2	41.8	201.79744	1-2	
3	-10.908	-14.703	1941.61720	-65.6	10.2	-83.0	25.3	31.67383	0.779	-88.2	73.3	36.0	38.9	36.7	119.04124	2-3	
4	-10.787	-8.878	2055.73257	-69.5	11.7	-84.2	22.3	33.52478	0.671	-88.1	79.0	32.3	47.9	46.3	173.33067	3-4	
5	-15.481	-7.247	2122.69232	-61.3	15.8	-87.7	28.2	34.62715	0.612	-93.8	80.8	32.4	52.3	47.5	150.08496	4-5	
6	-15.316	-13.585	1995.40664	-56.5	13.4	-85.0	31.4	32.54101	0.727	-93.4	74.7	36.1	43.4	37.1	185.12093	5-6	
7	-10.908	-14.703	1941.61720	-65.6	10.2	-83.0	25.3	31.67383	0.779	-88.2	73.3	36.0	38.9	36.7	137.51108	6-7	
8	-9.177	-17.567	1884.34863	-68.0	8.3	-82.0	24.0	30.64888	0.838	-86.1	70.3	38.0	33.4	32.0	100.23967	7-8	
9	-8.957	-12.386	1975.31001	-71.9	9.5	-82.6	21.0	32.18335	0.747	-85.8	75.4	34.3	41.8	41.0	155.12885	8-9	
10	-8.722	-6.054	2110.42334	-74.7	10.7	-83.4	18.1	34.28331	0.625	-85.3	81.7	30.5	51.5	51.0	189.62843	9-10	
11	-13.105	-4.502	2167.27588	-67.1	14.6	-87.2	23.7	35.31171	0.575	-90.9	83.4	30.4	55.0	52.5	140.55126	10-11	
12	-18.436	-1.830	2271.39488	-59.6	19.9	-93.4	29.7	36.92779	0.491	-97.1	86.2	30.7	60.7	54.8	179.27094	11-12	
13	-17.674	-9.661	2096.00925	-55.1	16.9	-88.0	32.9	34.13230	0.636	-96.4	78.7	34.4	50.6	42.4	225.82370	12-13	
14	-17.674	-15.659	1984.93172	-49.1	14.1	-85.0	36.2	32.23216	0.739	-95.8	73.0	38.1	42.6	32.3	173.15571	13-14	
15	-13.071	-16.812	1921.03644	-58.0	10.7	-83.2	30.0	31.30061	0.800	-90.8	71.4	37.9	37.0	32.4	143.41608	14-15	
16	-9.177	-17.567	1884.34863	-68.0	8.3	-82.0	24.0	30.64888	0.838	-86.1	70.3	38.0	33.4	32.0	120.08163	15-16	

JULY 31, 1964 13 HR 12 MIN 9 SEC 677 MS

TAB NO 41 ATLAS PHOTO NO 41 POD SEQUENCE NO 85

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										819.122	1722.31259	-4.058	-34.259	3457.768	2.006	-73.614	116.835
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.837	-18.065	1881.94405	-59.5	10.6	-85.2	29.3	32.71279	0.709	-92.5	70.1	38.6	34.2	30.6	0.	0-1	
2	-13.051	-11.374	2007.95021	-63.2	12.6	-84.7	26.8	32.79124	0.705	-90.9	76.7	34.2	45.2	41.7	201.27682	1-2	
3	-10.917	-14.721	1931.09207	-65.6	10.2	-83.0	25.3	31.50214	0.779	-88.2	73.3	36.0	38.9	36.7	118.35944	2-3	
4	-10.796	-8.931	2044.43756	-69.5	11.7	-84.2	22.3	33.34060	0.672	-88.1	78.9	32.3	47.8	46.3	172.28694	3-4	
5	-15.464	-7.312	2110.95560	-61.3	15.7	-87.7	28.2	34.43569	0.613	-93.8	80.8	32.4	52.2	47.4	149.22475	4-5	
6	-15.301	-13.609	1984.57724	-56.4	13.4	-85.0	31.4	32.36441	0.727	-93.4	74.7	36.1	43.4	37.1	183.96129	5-6	
7	-10.917	-14.721	1931.09207	-65.6	10.2	-83.0	25.3	31.50214	0.779	-88.2	73.3	36.0	38.9	36.7	136.75989	6-7	
8	-9.195	-17.570	1874.13339	-68.0	8.3	-82.0	24.0	30.48274	0.838	-86.1	70.3	38.0	33.4	32.0	99.69645	7-8	
9	-8.976	-12.418	1964.53781	-71.9	9.5	-82.6	21.0	32.00787	0.747	-85.8	75.4	34.3	41.8	40.9	154.24819	8-9	
10	-8.742	-6.127	2098.65326	-74.7	10.7	-83.4	18.2	34.09220	0.626	-85.3	81.6	30.5	51.4	51.0	188.40118	9-10	
11	-13.101	-4.586	2155.13382	-67.1	14.6	-87.2	23.8	35.11369	0.576	-90.9	83.3	30.4	54.9	52.5	139.74333	10-11	
12	-18.400	-1.941	2258.34888	-59.6	19.8	-93.3	29.7	36.71565	0.493	-97.1	86.1	30.7	60.6	54.7	178.06811	11-12	
13	-17.912	-9.712	2084.48792	-55.1	16.8	-88.0	32.8	33.94473	0.637	-96.4	78.7	34.4	50.5	42.4	224.12960	12-13	
14	-17.646	-15.673	1974.15669	-49.2	14.0	-85.0	36.2	32.05725	0.740	-95.8	73.0	38.1	42.6	32.3	172.11939	13-14	
15	-13.069	-16.819	1910.65022	-58.0	10.7	-83.1	30.0	31.13138	0.800	-90.8	71.4	37.9	37.0	32.4	142.61967	14-15	
16	-9.195	-17.570	1874.13339	-68.0	8.3	-82.0	24.0	30.48274	0.838	-86.1	70.3	38.0	33.4	32.0	119.43968	15-16	

JULY 31, 1964 13 HR 12 MIN 14 SEC 797 MS

TAB NO 42 ATLAS PHOTO NO 42 POD SEQUENCE NO 87

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										814.002	1712.45435	-4.080	-34.216	3447.910	2.008	-73.582	116.830
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.828	-18.044	1871.32103	-59.5	10.6	-85.1	29.3	32.53412	0.709	-92.5	70.0	38.7	34.2	30.5	0.	0-1	
2	-13.047	-11.413	1996.92780	-63.2	12.6	-84.7	26.8	32.61124	0.705	-90.9	76.6	34.2	45.1	41.7	200.73967	1-2	
3	-10.926	-14.740	1920.54620	-65.6	10.2	-83.0	25.3	31.33010	0.779	-88.2	73.2	36.0	38.9	36.7	117.67491	2-3	
4	-10.805	-8.984	2033.11977	-69.4	11.7	-84.2	22.3	33.15665	0.673	-88.1	78.9	32.3	47.8	46.2	171.24089	3-4	
5	-15.447	-7.378	2099.19238	-61.3	15.7	-87.7	28.2	34.24361	0.614	-93.8	80.7	32.4	52.2	47.4	148.36148	4-5	
6	-15.285	-13.635	1973.72363	-56.4	13.4	-85.0	31.4	32.18743	0.728	-93.4	74.7	36.1	43.4	37.0	182.79896	5-6	
7	-10.926	-14.740	1920.54620	-65.6	10.2	-83.0	25.3	31.33010	0.779	-88.2	73.2	36.0	38.9	36.7	136.00607	6-7	
8	-9.213	-17.573	1863.89978	-67.9	8.3	-82.0	24.1	30.31631	0.838	-86.1	70.3	38.0	33.4	32.0	99.15121	7-8	
9	-8.993	-12.450	1953.74525	-71.8	9.6	-82.6	21.1	31.83206	0.747	-85.8	75.4	34.3	41.8	40.9	153.36536	8-9	
10	-8.762	-6.200	2086.86194	-74.6	10.7	-83.3	18.2	33.90074	0.626	-85.3	81.5	30.5	51.4	50.9	187.17263	9-10	
11	-13.096	-4.670	2142.96677	-67.0	14.6	-87.2	23.8	34.91565	0.577	-90.9	83.2	30.4	54.8	52.4	138.93246	10-11	
12	-18.364	-2.052	2245.27139	-59.6	19.8	-93.2	29.7	36.50308	0.494	-97.1	85.9	30.7	60.5	54.5	176.86333	11-12	
13	-17.881	-9.763	2072.93915	-55.1	16.8	-88.0	32.8	33.75672	0.638	-96.4	78.6	34.4	50.5	42.3	222.43541	12-13	
14	-17.617	-15.667	1963.35719	-49.2	14.0	-85.0	36.2	31.88194	0.740	-95.8	73.0	38.1	42.5	32.2	171.08002	13-14	
15	-13.066	-16.825	1900.24261	-58.0	10.7	-83.1	30.0	30.96180	0.800	-90.8	71.4	37.9	37.0	32.4	141.82048	14-15	
16	-9.213	-17.573	1863.89978	-67.9	8.3	-82.0	24.1	30.31631	0.838	-86.1	70.3	38.0	33.4	32.0	118.79580	15-16	

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 12 MIN 19 SEC 917 MS

TAB NO 43

ATLAS PHOTO NO 43

POD SEQUENCE NO 89

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
808.883 1702.58835 -4.102 -34.173 3438.044 2.010 -73.549 116.824

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.818	-18.102	1860.68822	-59.5	10.5	-85.1	29.4	32.35456	0.710	-92.5	70.0	38.7	34.1	30.5	0.	0-1
2	-13.043	-11.453	1985.85272	-63.2	12.6	-84.7	26.8	32.43038	0.706	-90.9	76.6	34.2	45.1	41.6	200.14588	1-2
3	-10.933	-14.760	1909.95819	-65.5	10.2	-82.9	25.3	31.15738	0.779	-88.2	73.2	36.0	38.9	36.6	116.98196	2-3
4	-10.813	-9.040	2021.75021	-69.4	11.7	-84.1	22.3	32.97066	0.673	-88.1	78.8	32.3	47.7	46.2	170.18634	3-4
5	-15.428	-7.446	2087.36206	-61.3	15.7	-87.7	28.2	34.05082	0.615	-93.8	80.6	32.4	52.1	47.3	147.48816	4-5
6	-15.268	-13.662	1962.81621	-56.4	13.4	-85.0	31.4	32.00957	0.728	-93.4	74.7	36.1	43.3	37.0	181.62481	5-6
7	-10.933	-14.760	1909.95819	-65.5	10.2	-82.9	25.3	31.15738	0.779	-88.2	73.2	36.0	38.9	36.6	135.24487	6-7
8	-9.229	-17.577	1853.63187	-67.9	8.3	-81.9	24.1	30.14931	0.838	-86.1	70.3	38.0	33.4	32.0	98.60012	7-8
9	-9.013	-12.484	1942.91119	-71.8	9.6	-82.6	21.1	31.65557	0.748	-85.8	75.3	34.3	41.7	40.9	152.47639	8-9
10	-8.781	-6.275	2075.01923	-74.6	10.7	-83.3	18.3	33.70845	0.627	-85.3	81.4	30.5	51.3	50.8	185.93504	9-10
11	-13.091	-4.257	2130.73337	-67.0	14.5	-87.1	23.8	34.71634	0.578	-90.9	83.1	30.4	54.8	52.3	138.11246	10-11
12	-18.326	-2.166	2232.10565	-59.6	19.7	-93.2	29.7	36.28908	0.496	-97.1	85.7	30.7	60.4	54.3	175.64210	11-12
13	-17.849	-9.816	2061.32205	-55.1	16.8	-87.9	32.8	33.56760	0.639	-96.4	78.6	34.4	50.4	42.2	220.72310	12-13
14	-17.587	-15.703	1952.50214	-49.2	14.0	-85.0	36.1	31.70574	0.740	-95.8	72.9	38.1	42.5	32.2	170.02940	13-14
15	-13.061	-16.834	1889.79210	-58.0	10.7	-83.1	30.0	30.79153	0.800	-90.8	71.4	37.9	37.0	32.4	141.01291	14-15
16	-9.229	-17.577	1853.63187	-67.9	8.3	-81.9	24.1	30.14931	0.838	-86.1	70.3	38.0	33.4	32.0	118.14696	15-16

JULY 31, 1964 13 HR 12 MIN 25 SEC 37 MS

TAB NO 44

ATLAS PHOTO NO 44

POD SEQUENCE NO 91

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
805.663 1072.71323 -4.174 -34.129 3428.169 2.012 -73.516 116.819

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.809	-18.121	1850.04477	-59.5	10.5	-85.1	29.4	32.17477	0.710	-92.6	70.0	38.7	34.1	30.5	0.	0-1
2	-13.038	-11.493	1974.76511	-63.2	12.6	-84.7	26.8	32.24931	0.706	-90.9	76.6	34.2	45.1	41.6	199.54939	1-2
3	-10.940	-14.780	1899.35771	-65.5	10.2	-82.9	25.3	30.98446	0.779	-88.2	73.2	36.0	38.9	36.6	116.28860	2-3
4	-10.821	-9.095	2010.36905	-69.4	11.7	-84.1	22.4	32.78508	0.674	-88.1	78.8	32.3	47.7	46.1	169.13179	3-4
5	-15.410	-7.514	2075.52063	-61.3	15.7	-87.6	28.2	33.85766	0.616	-93.8	80.6	32.4	52.0	47.2	146.61428	4-5
6	-15.251	-13.689	1951.89592	-56.4	13.3	-85.0	31.4	31.83150	0.728	-93.4	74.6	36.1	43.3	37.0	180.45142	5-6
7	-10.940	-14.780	1899.35771	-65.5	10.2	-82.9	25.3	30.98446	0.779	-88.2	73.2	36.0	38.9	36.6	134.48274	6-7
8	-9.246	-17.582	1843.35204	-67.8	8.3	-81.9	24.1	29.98212	0.838	-86.1	70.3	38.0	33.4	32.0	98.08425	7-8
9	-9.031	-12.518	1932.06511	-71.8	9.6	-82.6	21.2	31.47889	0.748	-85.8	75.3	34.3	41.7	40.8	151.58673	8-9
10	-8.800	-6.349	2063.16681	-74.5	10.8	-83.3	18.3	33.51601	0.628	-85.3	81.4	30.5	51.2	50.7	184.69883	9-10
11	-13.085	-4.844	2118.44076	-67.0	14.5	-87.1	23.9	34.51688	0.580	-90.9	83.0	30.4	54.7	52.2	137.23218	10-11
12	-18.289	-2.280	2218.93631	-59.6	19.7	-93.1	29.7	36.07499	0.498	-97.1	85.7	30.7	60.3	54.3	174.42414	11-12
13	-17.816	-9.870	2049.69305	-55.1	16.7	-87.9	32.8	33.37828	0.639	-96.4	78.5	34.4	50.4	42.2	219.01751	12-13
14	-17.557	-15.719	1941.63435	-49.2	14.0	-85.0	36.1	31.52933	0.741	-95.8	72.9	38.1	42.5	32.2	168.97883	13-14
15	-13.056	-16.842	1879.32877	-58.0	10.7	-83.1	30.0	30.62104	0.800	-90.8	71.4	37.9	37.0	32.4	140.20454	14-15
16	-9.246	-17.582	1843.35204	-67.8	8.3	-81.9	24.1	29.98212	0.838	-86.1	70.3	38.0	33.4	32.0	117.49723	15-16

JULY 31, 1964 13 HR 12 MIN 30 SEC 157 MS

TAB NO 45

ATLAS PHOTO NO 45

POD SEQUENCE NO 93

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
798.643 1682.83112 -4.146 -34.086 3418.286 2.014 -73.483 116.813

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.800	-18.140	1839.39073	-59.5	10.5	-85.1	29.4	31.99475	0.710	-92.6	70.0	38.7	34.1	30.4	0.	0-1
2	-13.034	-11.534	1963.66214	-63.2	12.6	-84.7	26.8	32.06799	0.707	-90.9	76.5	34.2	45.0	41.6	198.94377	1-2
3	-10.948	-14.801	1888.74191	-65.5	10.2	-82.9	25.4	30.81129	0.780	-88.2	73.2	36.0	38.8	36.6	115.59465	2-3
4	-10.829	-9.151	1998.97070	-69.3	11.7	-84.1	22.4	32.59922	0.675	-88.1	78.7	32.3	47.6	46.1	168.07539	3-4
5	-15.391	-7.582	2063.66519	-61.3	15.6	-87.6	28.3	33.66427	0.617	-93.8	80.5	32.4	52.0	47.1	145.74102	4-5
6	-15.234	-13.717	1940.96239	-56.4	13.3	-84.9	31.4	31.65321	0.729	-93.4	74.6	36.1	43.3	37.0	179.27702	5-6
7	-10.948	-14.801	1888.74191	-65.5	10.2	-82.9	25.4	30.81129	0.780	-88.2	73.2	36.0	38.8	36.6	133.72056	6-7
8	-9.263	-17.587	1833.05743	-67.8	8.3	-81.9	24.2	29.81469	0.838	-86.1	70.3	38.0	33.4	32.0	97.49554	7-8
9	-9.049	-12.552	1921.20195	-71.7	9.6	-82.5	21.2	31.30193	0.748	-85.8	75.3	34.3	41.7	40.8	150.69486	8-9
10	-8.820	-6.425	2051.29605	-74.5	10.8	-83.3	18.4	33.32327	0.629	-85.3	81.3	30.5	51.2	50.7	183.46118	9-10
11	-13.080	-4.931	2106.23315	-67.0	14.5	-87.1	23.9	34.33177	0.581	-91.0	82.9	30.4	54.6	52.1	136.47232	10-11
12	-18.251	-2.394	2205.76041	-59.6	19.6	-93.0	29.8	35.86081	0.499	-97.1	85.6	30.7	60.2	54.1	173.21093	11-12
13	-17.784	-9.923	2038.05231	-55.1	16.7	-87.9	32.8	33.18877	0.640	-96.4	78.4	34.4	50.3	42.2	217.31618	12-13
14	-17.527	-15.736	1930.75577	-49.2	14.0	-85.0	36.1	31.35274	0.741	-95.8	72.9	38.1	42.4	32.2	167.92717	13-14
15	-13.052	-16.851	1868.85205	-58.0	10.7	-83.1	30.0	30.45034	0.800	-90.8	71.4	37.9	37.0	32.3	139.39676	14-15
16	-9.263	-17.587	1833.05743	-67.8	8.3	-81.9	24.2	29.81469	0.838	-86.1	70.3	38.0	33.4	32.0	116.84696	15-16

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JULY 31, 1964 13 HR 12 MIN 35 SEC 277 MS TAB NO 46 ATLAS PHOTO NO 46 POD SEQUENCE NO 95

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				793.523		1672.93591	-4.168	-34.041	3408.395	2.016	-73.450	116.807		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-11.791	-18.158	1828.72617	-59.5	10.5	-85.1	29.4	31.81444	0.711	-92.6	70.0 38.7	34.0	0.	0-1
2	-13.031	-11.575	1952.53876	-63.1	12.6	-84.7	26.9	31.88633	0.707	-90.9	76.5 34.2	45.0	41.5	198.31790 1-2
3	-10.956	-14.822	1878.10582	-65.5	10.2	-82.9	25.4	30.63778	0.780	-88.2	73.2 36.1	38.8	36.6	114.89987 2-3
4	-10.838	-9.208	1987.54536	-69.3	11.7	-84.1	22.4	32.41291	0.675	-88.1	78.7 32.3	47.6	46.0	167.01349 3-4
5	-15.374	-7.652	2051.79059	-61.3	15.6	-87.6	28.3	33.47057	0.618	-93.8	80.4 32.4	51.9	47.1	144.87005 4-5
6	-15.219	-13.746	1930.01479	-56.4	13.3	-84.9	31.4	31.47470	0.729	-93.4	74.6 36.1	43.2	36.9	178.09856 5-6
7	-10.956	-14.822	1878.10582	-65.5	10.2	-82.9	25.4	30.63778	0.780	-88.2	73.2 36.1	38.8	36.6	132.95983 6-7
8	-9.281	-17.592	1822.74326	-67.8	8.3	-81.9	24.2	29.64694	0.838	-86.1	70.3 38.0	33.4	32.0	96.94178 7-8
9	-9.068	-12.587	1910.31247	-71.7	9.6	-82.5	21.3	31.12455	0.749	-85.6	75.2 34.3	41.6	40.8	149.79819 8-9
10	-8.840	-6.501	2039.39169	-74.4	10.8	-83.3	18.4	33.12997	0.630	-85.3	81.2 30.5	51.1	50.6	182.21683 9-10
11	-13.075	-5.019	2093.94897	-66.9	14.5	-87.0	23.9	34.11703	0.582	-91.0	82.9 30.4	54.5	52.0	135.65372 10-11
12	-18.215	-2.509	2192.57214	-59.6	19.6	-92.9	29.8	35.64643	0.501	-97.1	85.5 30.7	60.1	54.0	172.00533 11-12
13	-17.753	-9.978	2026.39957	-55.1	16.7	-87.9	32.8	32.99907	0.641	-96.4	78.4 34.4	50.2	42.1	215.61470 12-13
14	-17.498	-15.753	1919.86943	-49.3	13.9	-85.0	36.1	31.17603	0.741	-95.8	72.9 38.1	42.4	32.2	166.87241 13-14
15	-13.049	-16.860	1858.36066	-58.0	10.7	-83.1	30.0	30.27940	0.800	-90.8	71.4 37.9	37.0	32.3	138.59133 14-15
16	-9.281	-17.592	1822.74326	-67.8	8.3	-81.9	24.2	29.64694	0.838	-86.1	70.3 38.0	33.4	32.0	116.19733 15-16

JULY 31, 1964 13 HR 12 MIN 40 SEC 396 MS TAB NO 47 ATLAS PHOTO NO 47 POD SEQUENCE NO 97

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				788.403		1663.04013	-4.190	-33.997	3398.495	2.018	-73.417	116.802		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-11.782	-18.177	1818.05078	-59.5	10.5	-85.1	29.4	31.63391	0.711	-92.6	70.0 38.7	34.0	0.	0-1
2	-13.027	-11.617	1941.40262	-63.1	12.6	-84.7	26.9	31.70447	0.708	-90.9	76.4 34.2	45.0	41.5	197.68946 1-2
3	-10.965	-14.844	1867.45708	-65.4	10.2	-82.9	25.4	30.46407	0.780	-88.2	73.1 36.1	38.8	36.6	114.20468 2-3
4	-10.847	-9.265	1976.10843	-69.3	11.7	-84.1	22.5	32.22642	0.676	-88.1	78.6 32.3	47.5	45.9	165.95178 3-4
5	-15.357	-7.721	2039.90465	-61.2	15.6	-87.5	28.3	33.27668	0.619	-93.8	80.4 32.4	51.8	47.0	143.99846 4-5
6	-15.203	-13.774	1919.05396	-56.4	13.3	-84.9	31.4	31.29596	0.730	-93.4	74.5 36.1	43.2	36.9	176.92095 5-6
7	-10.965	-14.844	1867.45708	-65.4	10.2	-82.9	25.4	30.46407	0.780	-88.2	73.1 36.1	38.8	36.6	132.19813 6-7
8	-9.298	-17.598	1812.41695	-67.7	8.4	-81.9	24.3	29.47899	0.838	-86.2	70.3 38.0	33.4	32.0	96.38731 7-8
9	-9.087	-12.623	1899.41171	-71.6	9.6	-82.5	21.3	30.94697	0.749	-85.8	75.2 34.3	41.6	40.7	148.90091 8-9
10	-8.860	-6.578	2027.47791	-74.4	10.8	-83.3	18.5	32.93653	0.631	-85.3	81.2 30.6	51.0	50.5	180.97412 9-10
11	-13.071	-5.107	2081.65591	-66.9	14.5	-87.0	23.9	33.91675	0.583	-91.0	82.8 30.4	54.4	51.9	134.83486 10-11
12	-18.178	-2.624	2179.38004	-59.6	19.5	-92.8	29.8	35.43199	0.503	-97.1	85.4 30.7	59.9	53.9	170.80265 11-12
13	-17.722	-10.032	2014.73459	-55.1	16.6	-87.8	32.8	32.80917	0.642	-96.4	78.3 34.4	50.2	42.0	213.92002 12-13
14	-17.469	-15.770	1908.96942	-49.3	13.9	-85.0	36.0	30.99910	0.742	-95.8	72.9 38.1	42.4	32.2	165.81767 13-14
15	-13.046	-16.870	1847.85637	-58.0	10.7	-83.1	30.0	30.10825	0.800	-90.8	71.3 37.9	37.0	32.3	137.78499 14-15
16	-9.298	-17.598	1812.41695	-67.7	8.4	-81.9	24.3	29.47899	0.838	-86.2	70.3 38.0	33.4	32.0	115.54691 15-16

JULY 31, 1964 13 HR 12 MIN 45 SEC 516 MS TAB NO 48 ATLAS PHOTO NO 48 POD SEQUENCE NO 99

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				783.283		1653.13202	-4.213	-33.952	3388.587	2.020	-73.383	116.796		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-11.773	-18.196	1807.36493	-59.4	10.5	-85.1	29.4	31.45347	0.712	-92.6	69.9 38.7	33.9	30.3	0.
2	-13.024	-11.658	1930.27371	-63.1	12.6	-84.6	26.9	31.52273	0.708	-90.9	76.4 34.2	44.9	41.4	197.08739
3	-10.973	-14.865	1856.81140	-65.4	10.2	-82.9	25.5	30.29041	0.780	-88.2	73.1 36.1	38.8	36.5	113.51246
4	-10.855	-9.321	1964.68297	-69.2	11.7	-84.1	22.5	32.04011	0.677	-88.1	78.5 32.3	47.5	45.9	164.89603
5	-15.339	-7.789	2028.03342	-61.2	15.6	-87.5	28.3	33.08303	0.620	-93.8	80.3 32.4	51.8	46.9	143.12916
6	-15.187	-13.802	1908.09726	-56.4	13.3	-84.9	31.4	31.11730	0.730	-93.4	74.5 36.1	43.2	36.9	175.75119
7	-10.973	-14.865	1856.81140	-65.4	10.2	-82.9	25.5	30.29041	0.780	-88.2	73.1 36.1	38.8	36.5	131.43707
8	-9.316	-17.603	1802.09131	-67.7	8.4	-81.9	24.3	29.31105	0.838	-86.2	70.3 38.0	33.4	32.0	95.83417
9	-9.106	-12.657	1898.51695	-71.6	9.6	-82.5	21.3	30.76950	0.749	-85.8	75.2 34.3	41.6	40.7	148.00718
10	-8.880	-6.654	2015.58228	-74.4	10.8	-83.2	18.6	32.74337	0.632	-85.3	81.1 30.6	50.9	50.4	179.74050
11	-13.066	-5.194	2069.36534	-66.9	14.5	-86.9	24.0	33.71681	0.584	-91.0	82.7 30.4	54.3	51.8	134.01844
12	-18.142	-2.736	2166.22089	-59.6	19.5	-92.7	29.8	35.21808	0.505	-97.1	85.3 30.7	59.8	53.8	169.60838
13	-17.691	-10.086	2003.08002	-55.1	16.6	-87.8	32.8	32.61943	0.643	-96.4	78.3 34.4	50.1	42.0	212.24416
14	-17.440	-15.786	1898.07231	-49.3	13.9	-85.0	36.0	30.82220	0.742	-95.8	72.9 38.1	42.4	32.1	164.76882
15	-13.042	-16.878	1837.35277	-58.0	10.7	-83.1	30.0	29.93710	0.801	-90.8	71.3 37.9	37.0	32.3	136.97938
16	-9.316	-17.603	1802.09131	-67.7	8.4	-81.9	24.3	29.31105	0.838	-86.2	70.3 38.0	33.4	32.0	114.89633

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JULY 31, 1964 13 HR 12 MIN 50 SEC 636 MS

TAB NO 49

ATLAS PHOTO NO 49

POD SEQUENCE NO 101

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				778.163		1643.21533	-4.235	-33.908	3378.671	2.023	-73.349	116.790				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.763	-18.214	1796.66829	-59.4	10.5	-85.1	29.4	31.27340	0.712	-92.6	69.9	38.8	33.9	30.3	0.	0-1
2	-13.020	-11.696	1919.16989	-63.1	12.6	-84.6	26.9	31.34140	0.709	-90.9	76.4	34.2	44.9	41.4	196.53875	1-2
3	-10.981	-14.884	1646.18311	-65.4	10.2	-82.9	25.5	30.11703	0.780	-88.3	73.1	36.1	38.8	36.5	112.82590	2-3
4	-10.864	-9.376	1953.29004	-69.2	11.7	-84.0	22.6	31.85434	0.677	-88.1	78.5	32.3	47.4	45.8	163.85156	3-4
5	-15.321	-7.855	2016.20050	-61.2	15.6	-87.5	28.3	32.89001	0.621	-93.8	80.2	32.4	51.7	46.8	142.26450	4-5
6	-15.171	-13.828	1897.16022	-56.4	13.3	-84.9	31.4	30.93895	0.730	-93.4	74.5	36.1	43.1	36.8	174.59571	5-6
7	-10.981	-14.884	1646.18311	-65.4	10.2	-82.9	25.5	30.11703	0.780	-88.3	73.1	36.1	38.8	36.5	130.67810	6-7
8	-9.334	-17.607	1791.77780	-67.6	8.4	-81.9	24.3	29.14331	0.838	-86.2	70.3	38.0	33.4	32.0	95.28460	7-8
9	-9.124	-12.690	1877.64516	-71.5	9.6	-82.5	21.4	30.59240	0.750	-85.8	75.1	34.3	41.5	40.7	147.12078	8-9
10	-8.900	-6.727	2003.72986	-74.3	10.8	-83.2	18.6	32.55092	0.633	-85.3	81.0	30.6	50.9	50.4	178.52294	9-10
11	-13.062	-5.278	2057.16214	-66.9	14.5	-86.9	24.0	33.51768	0.585	-91.0	82.6	30.4	54.2	51.7	133.20700	10-11
12	-18.105	-2.846	2153.12799	-59.6	19.4	-92.6	29.8	35.00525	0.506	-97.1	85.2	30.7	59.7	53.6	168.42730	11-12
13	-17.659	-10.137	1991.45631	-55.1	16.6	-87.8	32.8	32.43020	0.643	-96.4	78.2	34.4	50.1	41.9	210.59820	12-13
14	-17.411	-15.801	1887.19022	-49.3	13.9	-85.0	36.0	30.64555	0.742	-95.9	72.8	38.1	42.3	32.1	163.73100	13-14
15	-13.039	-16.886	1826.86209	-58.0	10.7	-83.1	30.0	29.76617	0.801	-90.8	71.3	37.9	37.0	32.3	136.17572	14-15
16	-9.334	-17.607	1791.77780	-67.6	8.4	-81.9	24.3	29.14331	0.838	-86.2	70.3	38.0	33.4	32.0	114.24678	15-16

JULY 31, 1964 13 HR 12 MIN 55 SEC 756 MS

TAB NO 50

ATLAS PHOTO NO 50

POD SEQUENCE NO 103

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LCN	R	V	PTH	AZ		
PHOTO DATA				773.043				1633.28995	-4.258	-33.862	3368.745	2.025	-73.315	116.784		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.754	-18.233	1785.96063	-59.4	10.5	-85.1	29.4	31.09310	0.712	-92.6	69.9	38.8	33.9	30.3	0.	0-1
2	-13.016	-11.735	1908.05235	-63.1	12.6	-84.6	26.9	31.15984	0.709	-90.9	76.3	34.2	44.8	41.3	195.98642	1-2
3	-10.989	-14.903	1635.54134	-65.3	10.2	-82.9	25.5	29.94344	0.781	-88.3	73.1	36.1	38.8	36.5	112.13875	2-3
4	-10.872	-9.430	1941.88428	-69.2	11.7	-84.0	22.6	31.66835	0.678	-88.1	78.4	32.3	47.4	45.8	162.80692	3-4
5	-15.303	-7.921	2004.35486	-61.2	15.5	-87.4	28.3	32.69678	0.621	-93.8	80.2	32.4	51.6	46.8	141.39915	4-5
6	-15.155	-13.854	1886.20915	-56.4	13.3	-84.9	31.4	30.76038	0.731	-93.4	74.5	36.1	43.1	36.8	173.44064	5-6
7	-10.989	-14.903	1635.54134	-65.3	10.2	-82.9	25.5	29.94344	0.781	-88.3	73.1	36.1	38.8	36.5	129.91795	6-7
8	-9.351	-17.610	1781.45149	-67.6	8.4	-81.9	24.4	28.97537	0.838	-86.2	70.3	38.0	33.4	32.0	94.73422	7-8
9	-9.143	-12.723	1866.76036	-71.5	9.6	-82.5	21.4	30.41508	0.750	-85.8	75.1	34.3	41.5	40.6	146.23355	8-9
10	-8.920	-6.800	1991.86639	-74.3	10.8	-83.2	18.7	32.35828	0.634	-85.3	80.9	30.6	50.8	50.3	177.30641	9-10
11	-13.057	-5.362	2044.92906	-66.8	14.4	-86.9	24.0	33.31837	0.587	-91.0	82.5	30.4	54.2	51.6	132.29519	10-11
12	-18.069	-2.956	2140.02853	-59.6	19.4	-92.6	29.8	34.79231	0.508	-97.1	85.1	30.7	59.6	53.5	167.24860	11-12
13	-17.628	-10.189	1979.81915	-55.1	16.5	-87.8	32.8	32.24074	0.644	-96.4	78.2	34.4	50.0	41.9	208.95760	12-13
14	-17.382	-15.815	1876.29417	-49.3	13.9	-85.0	36.0	30.46867	0.742	-95.9	72.8	38.1	42.3	32.1	162.69291	13-14
15	-13.035	-16.893	1816.35786	-58.0	10.7	-83.1	30.0	29.59502	0.801	-90.8	71.3	37.9	37.0	32.3	135.37111	14-15
16	-9.351	-17.610	1781.45149	-67.6	8.4	-81.9	24.4	28.97537	0.838	-86.2	70.3	38.0	33.4	32.0	113.59635	15-16

JULY 31, 1964 13 HR 13 MIN 0 SEC 876 MS

TAB NO 51

ATLAS PHOTO NO 51

POD SEQUENCE NO 105

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				767.923		1623.35608	-4.281	-33.817	3358.811	2.027	-73.281	116.778				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZ SUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.745	-18.252	1775.24239	-59.4	10.5	-85.1	29.4	30.91238	0.713	-92.6	69.9	38.8	33.8	30.3	0.	0-1
2	-13.012	-11.775	1896.90961	-63.0	12.6	-84.6	27.0	30.97787	0.710	-90.9	76.3	34.2	44.8	41.3	195.41261	1-2
3	-10.997	-14.923	1824.87708	-65.3	10.2	-82.9	25.5	29.76947	0.781	-88.3	73.1	36.1	38.8	36.5	111.44904	2-3
4	-10.881	-9.485	1930.45221	-69.1	11.7	-84.0	22.6	31.48194	0.679	-88.1	78.4	32.3	47.3	45.7	161.75869	3-4
5	-15.286	-7.988	1992.48143	-61.2	15.5	-87.4	28.3	32.50310	0.622	-93.8	80.1	32.4	51.6	46.7	140.53157	4-5
6	-15.139	-13.881	1875.23409	-56.4	13.3	-84.9	31.4	30.58141	0.731	-93.4	74.4	36.1	43.1	36.8	172.28190	5-6
7	-10.997	-14.923	1824.87708	-65.3	10.2	-82.9	25.5	29.76947	0.781	-88.3	73.1	36.1	38.8	36.5	129.15588	6-7
8	-9.369	-17.614	1771.10507	-67.6	8.4	-81.9	24.4	28.80709	0.838	-86.2	70.3	38.0	33.4	32.0	94.18168	7-8
9	-9.162	-12.757	1955.85201	-71.4	9.7	-82.5	21.5	30.23738	0.750	-85.8	75.1	34.3	41.5	40.6	145.34322	8-9
10	-8.940	-6.874	1979.97598	-74.2	10.8	-83.2	18.7	32.16520	0.635	-85.3	80.9	30.6	50.7	50.2	176.08652	9-10
11	-13.052	-5.448	2032.66747	-66.8	14.4	-86.8	24.1	33.11860	0.588	-91.0	82.4	30.4	54.1	51.6	131.58110	10-11
12	-18.032	-3.066	2126.90109	-59.6	19.3	-92.5	29.8	34.57892	0.510	-97.1	85.0	30.7	59.5	53.4	166.06903	11-12
13	-17.596	-10.241	1968.15544	-55.1	16.5	-87.8	32.8	32.05085	0.645	-96.4	78.1	34.4	49.9	41.8	207.31534	12-13
14	-17.352	-15.831	1865.37544	-49.3	13.8	-85.0	36.0	30.29142	0.743	-95.9	72.8	38.1	42.3	32.1	161.65117	13-14
15	-13.031	-16.901	1805.83221	-58.0	10.7	-83.1	30.0	29.42352	0.801	-90.8	71.3	37.9	37.0	32.3	134.56461	14-15
16	-9.369	-17.614	1771.10507	-67.6	8.4	-81.9	24.4	28.80709	0.838	-86.2	70.3	38.0	33.4	32.0	112.94417	15-16

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JULY 31, 1964 13 HR 13 MIN 5 SEC 996 MS

TAB NO 52 ATLAS PHOTO NO 52 POD SEQUENCE NO 107

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				762.803		1613.41348	-4.304	-33.771	3348.869	2.029	-73.247	116.773				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.736	-18.271	1764.51311	-59.4	10.5	-85.0	29.4	30.73116	0.713	-92.6	69.9	38.8	33.8	30.2	0.	0-1
2	-13.008	-11.816	1885.73616	-63.0	12.6	-84.6	27.0	30.79540	0.710	-90.9	76.3	34.2	44.8	41.2	194.80976	1-2
3	-11.005	-14.944	1814.18585	-65.3	10.2	-82.9	25.6	29.59507	0.781	-88.3	73.1	36.1	38.7	36.4	110.75590	2-3
4	-10.889	-9.541	1918.98753	-69.1	11.7	-84.0	22.7	31.29499	0.679	-88.1	78.3	32.3	47.3	45.7	160.70542	3-4
5	-15.268	-8.056	1980.57303	-61.2	15.5	-87.4	28.3	32.30884	0.623	-93.8	80.0	32.4	51.5	46.6	139.66123	4-5
6	-15.122	-13.908	1864.23022	-56.4	13.2	-84.9	31.4	30.40197	0.731	-93.4	74.4	36.1	43.1	36.7	171.11755	5-6
7	-11.005	-14.944	1814.18585	-65.3	10.2	-82.9	25.6	29.59507	0.781	-88.3	73.1	36.1	38.7	36.4	128.39147	6-7
8	-9.386	-17.619	1760.73489	-67.5	8.4	-81.9	24.4	28.63843	0.838	-86.2	70.3	38.0	33.4	32.0	93.62643	7-8
9	-9.180	-12.792	1844.91481	-71.4	9.7	-82.5	21.5	30.05921	0.751	-85.8	75.0	34.3	41.5	40.6	144.44859	8-9
10	-8.960	-6.950	1968.05099	-74.2	10.8	-83.2	18.8	31.97156	0.636	-85.3	80.8	30.6	50.7	50.1	174.86122	9-10
11	-13.047	-5.534	2020.36900	-66.8	14.4	-86.8	24.1	32.91822	0.589	-91.0	82.4	30.4	54.0	51.5	130.76421	10-11
12	-17.995	-3.178	2113.74584	-59.5	19.3	-92.4	29.8	34.36491	0.511	-97.1	84.9	30.7	59.4	53.3	164.88729	11-12
13	-17.564	-10.295	1956.45900	-55.1	16.5	-87.7	32.8	31.86044	0.646	-96.4	78.1	34.4	49.9	41.7	205.66824	12-13
14	-17.323	-15.847	1854.42969	-49.4	13.8	-85.0	35.9	30.11374	0.743	-95.9	72.8	38.1	42.3	32.1	160.60426	13-14
15	-13.027	-16.910	1795.28128	-57.9	10.7	-83.1	30.0	29.25161	0.801	-90.8	71.3	37.9	36.9	32.3	133.75599	14-15
16	-9.386	-17.619	1760.73489	-67.5	8.4	-81.9	24.4	28.63843	0.838	-86.2	70.3	38.0	33.4	32.0	112.29019	15-16

JULY 31, 1964 13 HR 13 MIN 11 SEC 116 MS

TAB NO 53 ATLAS PHOTO NO 53 POD SEQUENCE NO 109

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				757.684		1603.46216	-4.327	-33.725	3338.917	2.031	-73.212	116.767				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.726	-18.290	1753.77292	-59.4	10.5	-85.0	29.5	30.54971	0.714	-92.6	69.8	38.8	33.8	30.2	0.	0-1
2	-13.004	-11.857	1874.54950	-63.0	12.5	-84.6	27.0	30.61272	0.710	-90.9	76.2	34.2	44.7	41.2	194.20368	1-2
3	-11.013	-14.965	1803.46151	-65.2	10.2	-82.9	25.6	29.42045	0.781	-88.3	73.0	36.1	38.7	36.4	110.06236	2-3
4	-10.898	-9.597	1907.51065	-69.1	11.7	-84.0	22.7	31.10784	0.680	-88.1	78.3	32.3	47.2	45.6	159.65214	3-4
5	-15.249	-8.124	1968.65274	-61.2	15.5	-87.3	28.4	32.11439	0.624	-93.8	80.0	32.4	51.4	46.6	138.79011	4-5
6	-15.106	-13.936	1853.21278	-56.4	13.2	-84.9	31.4	30.22232	0.732	-93.4	74.4	36.1	43.0	36.7	169.95391	5-6
7	-11.013	-14.965	1803.46151	-65.2	10.2	-82.9	25.6	29.42045	0.781	-88.3	73.0	36.1	38.7	36.4	127.62620	6-7
8	-9.403	-17.624	1750.35213	-67.5	8.4	-81.9	24.5	28.46956	0.838	-86.2	70.3	38.0	33.4	32.0	93.07045	7-8
9	-9.199	-12.826	1833.96507	-71.4	9.7	-82.4	21.6	29.88084	0.751	-85.8	75.0	34.3	41.4	40.5	143.55332	8-9
10	-8.979	-7.025	1956.11589	-74.1	10.9	-83.1	18.8	31.77776	0.637	-85.3	80.7	30.6	50.6	50.1	173.63736	9-10
11	-13.042	-5.621	2008.06078	-66.8	14.4	-86.8	24.1	32.71769	0.590	-91.0	82.3	30.4	53.9	51.4	129.94699	10-11
12	-17.958	-3.290	2100.56534	-59.5	19.2	-92.3	29.8	34.15082	0.513	-97.1	84.8	30.7	59.3	53.1	163.70794	11-12
13	-17.533	-10.348	1944.74968	-55.1	16.4	-87.7	32.8	31.66961	0.646	-96.4	78.0	34.4	49.8	41.7	204.02717	12-13
14	-17.293	-15.864	1843.47072	-49.4	13.8	-85.0	35.9	29.93564	0.743	-95.9	72.8	38.1	42.2	32.0	159.55723	13-14
15	-13.023	-16.919	1784.71707	-57.9	10.7	-83.1	30.0	29.07948	0.801	-90.8	71.3	37.9	36.9	32.3	132.94644	14-15
16	-9.403	-17.624	1750.35213	-67.5	8.4	-81.9	24.5	28.46956	0.838	-86.2	70.3	38.0	33.4	32.0	111.63533	15-16

JULY 31, 1964 13 HR 13 MIN 16 SEC 236 MS

TAB NO 54 ATLAS PHOTO NO 54 POD SEQUENCE NO 111

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				752.564		1593.50226	-4.350	-33.679	3328.958	2.033	-73.178	116.761				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.717	-18.308	1743.02184	-59.4	10.5	-85.0	29.5	30.36783	0.714	-92.6	69.8	38.8	33.7	30.2	0.	0-1
2	-13.000	-11.899	1863.33601	-63.0	12.5	-84.6	27.0	30.42959	0.711	-90.9	76.2	34.2	44.7	41.2	193.57409	1-2
3	-11.021	-14.986	1792.75331	-65.2	10.2	-82.9	25.6	29.24544	0.781	-88.3	73.0	36.1	38.7	36.4	109.36592	2-3
4	-10.906	-9.654	1896.00572	-69.0	11.7	-84.0	22.8	30.92024	0.681	-88.1	78.2	32.3	47.2	45.5	158.59501	3-4
5	-15.231	-8.193	1956.70282	-61.2	15.4	-87.3	28.4	31.91946	0.625	-93.8	79.9	32.4	51.4	46.5	137.91682	4-5
6	-15.089	-13.965	1847.16989	-56.4	13.2	-84.9	31.4	30.06224	0.732	-93.4	74.4	36.1	43.0	36.7	168.78631	5-6
7	-11.021	-14.986	1792.75331	-65.2	10.2	-82.9	25.6	29.24544	0.781	-88.3	73.0	36.1	38.7	36.4	126.85870	6-7
8	-9.421	-17.630	1739.94810	-67.4	8.4	-81.9	24.5	28.30035	0.838	-86.2	70.3	38.0	33.4	32.0	92.51219	7-8
9	-9.217	-12.862	1822.99020	-71.3	9.7	-82.4	21.6	29.70266	0.751	-85.8	75.0	34.3	41.4	40.5	142.65458	8-9
10	-8.993	-7.101	1944.15181	-74.1	10.9	-83.1	18.9	31.58349	0.638	-85.4	80.6	30.6	50.5	50.0	172.40978	9-10
11	-13.037	-5.708	1995.72182	-66.7	14.4	-86.7	24.2	32.51666	0.591	-91.0	82.2	30.4	53.8	51.3	129.12734	10-11
12	-17.921	-3.402	2087.36432	-59.5	19.2	-92.2	29.8	33.93622	0.515	-97.1	84.7	30.7	59.2	53.0	162.52750	11-12
13	-17.500	-10.403	1933.01213	-55.1	16.4	-87.7	32.7	31.47872	0.647	-96.4	78.0	34.4	49.8	41.6	202.38367	12-13
14	-17.263	-15.881	1832.48753	-49.4	13.8	-85.0	35.9	29.75755	0.744	-95.9	72.7	38.1	42.2	32.0	158.50635	13-14
15	-13.019	-16.928	1774.13016	-57.9	10.7	-83.1	30.1	28.90698	0.801	-90.8	71.3	37.9	36.9	32.2	132.13487	14-15
16	-9.421	-17.630	1739.94810	-67.4	8.4	-81.9	24.5	28.30035	0.838	-86.2	70.3	38.0	33.4	32.0	110.97880	15-16

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JULY 31, 1964 13 HR 13 MIN 21 SEC 356 MS

TAB NO 55

ATLAS PHOTO NO 55

POD SEQUENCE NO 113

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.706	-18.327	1732.25938	-59.4	10.5	-85.0	29.5	30.18548	0.714	-92.6	69.8	38.9	33.7	30.1	0.	0-1	
2	-12.996	-11.942	1852.09392	-63.0	12.5	-84.5	27.0	30.24600	0.711	-90.9	76.1	34.2	44.6	41.1	192.91889	1-2	
3	-11.024	-15.009	1781.99965	-65.2	10.2	-82.9	25.7	29.07002	0.781	-88.3	73.0	36.1	38.7	36.4	108.66651	2-3	
4	-10.914	-9.712	1884.47079	-69.0	11.7	-83.9	22.8	30.73215	0.681	-88.1	78.2	32.3	47.1	45.5	157.53357	3-4	
5	-15.213	-8.263	1944.72098	-61.1	15.4	-87.3	28.4	31.72401	0.626	-93.8	79.8	32.4	51.3	46.4	137.04096	4-5	
6	-15.072	-13.994	1831.09995	-56.4	13.2	-84.9	31.4	29.86173	0.733	-93.4	74.3	36.1	43.0	36.6	167.61412	5-6	
7	-11.024	-15.009	1781.99965	-65.2	10.2	-82.9	25.7	29.07002	0.781	-88.3	73.0	36.1	38.7	36.4	126.08901	6-7	
8	-9.438	-17.637	1729.52136	-67.4	8.4	-81.8	24.6	28.13077	0.838	-86.2	70.3	38.0	33.4	32.0	91.95157	7-8	
9	-9.235	-12.898	1811.98849	-71.3	9.7	-82.4	21.7	29.52264	0.752	-85.8	74.9	34.3	41.4	40.4	141.75217	8-9	
10	-9.019	-7.179	1932.15660	-74.0	10.9	-83.1	19.0	31.38812	0.639	-85.4	80.6	30.6	50.4	49.9	171.17810	9-10	
11	-13.032	-5.797	1983.34993	-66.7	14.4	-86.7	24.2	32.31568	0.592	-91.0	82.1	30.4	53.8	51.2	128.30534	10-11	
12	-17.884	-3.516	2074.13052	-59.5	19.1	-92.1	29.8	33.72110	0.516	-97.1	84.5	30.7	59.1	52.9	161.34564	11-12	
13	-17.468	-10.458	1821.24442	-55.1	16.4	-87.7	32.7	31.28714	0.648	-96.4	77.9	34.4	49.7	41.5	200.73744	12-13	
14	-17.233	-15.899	1821.47888	-49.4	13.8	-85.0	35.9	29.57884	0.744	-95.9	72.7	38.1	42.2	32.0	157.45118	13-14	
15	-13.015	-16.939	1763.51921	-57.9	10.7	-83.1	30.1	28.73409	0.801	-90.8	71.3	37.9	36.9	32.2	131.32125	14-15	
16	-9.438	-17.637	1729.52136	-67.4	8.4	-81.8	24.6	28.13077	0.838	-86.2	70.3	38.0	33.4	32.0	110.32051	15-16	

TAB NO 56

ATLAS PHOTO NO 56

POD SEQUENCE NO 115

JULY 31, 1964 13 HR 13 MIN 26 SEC 476 MS

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.699	-18.346	1721.48624	-59.3	10.5	-85.0	29.5	30.00290	0.715	-92.6	69.8	38.9	33.6	30.1	0.	0-1	
2	-12.991	-11.984	1840.53925	-62.9	12.5	-84.5	27.1	30.06220	0.712	-90.9	76.1	34.2	44.6	41.1	192.26099	1-2	
3	-11.036	-15.032	1771.23340	-65.2	10.2	-82.8	25.7	28.89439	0.782	-88.3	73.0	36.1	38.7	36.3	107.96672	2-3	
4	-10.922	-9.771	1872.92438	-69.0	11.7	-83.9	22.8	31.54387	0.682	-88.1	78.1	32.3	47.0	45.4	156.47241	3-4	
5	-15.194	-8.333	1932.72810	-61.1	15.4	-87.3	28.4	31.52837	0.627	-93.8	79.8	32.4	51.2	46.3	136.16470	4-5	
6	-15.055	-14.024	1820.01692	-56.4	13.2	-84.9	31.4	29.68100	0.733	-93.4	74.3	36.1	42.9	36.6	166.44290	5-6	
7	-11.036	-15.032	1771.23340	-65.2	10.2	-82.8	25.7	28.89439	0.782	-88.3	73.0	36.1	38.7	36.3	125.31848	6-7	
8	-9.455	-17.643	1719.08247	-67.4	8.5	-81.8	24.6	27.96099	0.838	-86.2	70.3	38.0	33.4	31.9	91.39022	7-8	
9	-9.254	-12.935	1800.97476	-71.2	9.7	-82.4	21.7	29.34343	0.752	-85.8	74.9	34.3	41.3	40.4	140.84927	8-9	
10	-9.038	-7.256	1920.15201	-74.0	10.9	-83.1	19.0	31.19379	0.640	-85.4	80.5	30.6	50.4	49.8	169.94785	9-10	
11	-13.026	-5.886	1970.96910	-66.7	14.4	-86.7	24.2	32.11337	0.594	-91.0	82.0	30.5	53.7	51.1	127.48308	10-11	
12	-17.847	-3.629	2060.89243	-59.5	19.1	-92.1	29.8	33.50591	0.518	-97.1	84.4	30.7	58.9	52.7	160.16648	11-12	
13	-17.436	-10.514	1909.46661	-55.1	16.3	-87.6	32.7	31.09536	0.649	-96.4	77.9	34.4	49.6	41.5	199.09735	12-13	
14	-17.203	-15.917	1810.45711	-49.4	13.7	-85.0	35.8	29.39993	0.745	-95.9	72.7	38.1	42.1	32.0	156.39616	13-14	
15	-13.011	-16.949	1752.89531	-57.9	10.7	-83.1	30.1	28.56099	0.801	-90.8	71.3	37.9	36.9	32.2	130.50683	14-15	
16	-9.455	-17.643	1719.08247	-67.4	8.5	-81.8	24.6	27.96099	0.838	-86.2	70.3	38.0	33.4	31.9	109.66172	15-16	

TAB NO 57

ATLAS PHOTO NO 57

POD SEQUENCE NO 117

JULY 31, 1964 13 HR 13 MIN 31 SEC 595 MS

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.987	-12.026	1829.58551	-62.9	12.5	-84.5	27.1	29.87842	0.712	-90.9	76.1	34.2	44.6	41.0	0.	1-2	
3	-11.043	-15.054	1760.46509	-65.1	10.2	-82.8	25.7	28.71873	0.782	-88.3	73.0	36.1	38.6	36.3	107.26895	2-3	
4	-10.930	-9.828	1861.38229	-68.9	11.7	-83.9	22.9	30.35566	0.683	-88.1	78.1	32.3	47.0	45.4	155.41556	3-4	
5	-15.175	-8.403	1920.74196	-61.1	15.4	-87.2	28.4	31.33285	0.628	-93.8	79.7	32.4	51.1	46.3	135.28975	4-5	
6	-15.038	-14.053	1808.93250	-56.4	13.2	-84.9	31.4	29.50025	0.733	-93.4	74.3	36.1	42.9	36.6	165.27751	5-6	
7	-11.043	-15.054	1760.46509	-65.1	10.2	-82.8	25.7	28.71873	0.782	-88.3	73.0	36.1	38.6	36.3	124.54806	6-7	
8	-9.472	-17.649	1708.63989	-67.3	8.5	-81.8	24.6	27.79115	0.838	-86.2	70.3	38.0	33.4	31.9	90.82964	7-8	
9	-9.272	-12.971	1789.96155	-71.2	9.7	-82.4	21.8	29.16402	0.753	-85.8	74.9	34.3	41.3	40.4	139.94872	8-9	
10	-9.058	-7.332	1908.15707	-73.9	10.9	-83.1	19.1	30.99901	0.641	-85.4	80.4	30.6	50.3	49.7	168.72453	9-10	
11	-13.021	-5.973	1958.60046	-66.7	14.4	-86.6	24.3	31.91185	0.595	-91.0	81.9	30.5	53.6	51.0	126.66234	10-11	
12	-17.809	-3.741	2047.61542	-59.5	19.0	-92.0	29.8	32.29106	0.520	-97.1	84.3	30.7	58.8	52.6	158.93254	11-12	
13	-17.403	-10.568	1897.68819	-55.1	16.3	-87.6	32.7	30.90363	0.650	-96.4	77.8	34.4	49.6	41.4	197.47184	12-13	
14	-17.172	-15.934	1799.43237	-49.4	13.7	-85.0	35.8	29.22096	0.745	-95.9	72.7	38.1	42.1	32.0	155.34518	13-14	
15	-13.006	-16.959	1742.26761	-57.9	10.7	-83.1	30.1	28.38783	0.801	-90.8	71.3	37.9	36.9	32.2	129.69265	14-15	
16	-9.472	-17.649	1708.63989	-67.3	8.5	-81.8	24.6	27.79115	0.838	-86.2	70.3	38.0	33.4	31.9	109.00163	15-16	

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JULY 31, 1964 13 HR 13 MIN 36 SEC 715 MS TAB NO 58 ATLAS PHOTO NO 58 POD SEQUENCE NO 119

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				732.084	1553.57355	-4.445	-33.491	3289.029	2.042	-73.037	116.737				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.982	-12.068	1818.33034	-62.9	12.5	-84.5	27.1	29.69462	0.713	-90.9	76.0	34.2	44.5	41.0	0.
3	-11.051	-15.075	1749.69301	-65.1	10.2	-82.8	25.8	28.54301	0.782	-88.3	72.9	36.1	38.6	36.3	106.57261
4	-10.938	-9.885	1849.84174	-68.9	11.7	-83.9	22.9	30.16747	0.683	-88.1	78.0	32.3	46.9	45.3	154.36220
5	-15.157	-8.471	1908.75925	-61.1	15.3	-87.2	28.4	31.13738	0.629	-93.8	79.6	32.4	51.1	46.2	134.41590
6	-15.021	-14.082	1797.84462	-56.4	13.1	-84.9	31.4	29.31945	0.734	-93.4	74.2	36.1	42.9	36.5	164.11694
7	-11.051	-15.075	1749.69301	-65.1	10.2	-82.8	25.8	28.54301	0.782	-88.3	72.9	36.1	38.6	36.3	123.77773
8	-9.489	-17.655	1698.19229	-67.3	8.5	-81.8	24.7	27.62123	0.838	-86.2	70.3	38.0	33.4	31.9	90.26963
9	-9.290	-13.006	1778.94666	-71.1	9.7	-82.4	21.8	28.98458	0.753	-85.8	74.8	34.3	41.3	40.3	139.04997
10	-9.077	-7.408	1896.16824	-73.9	10.9	-83.1	19.1	30.89423	0.642	-85.4	80.3	30.6	50.2	49.7	167.50696
11	-13.015	-6.060	1946.23997	-66.6	14.3	-86.6	24.3	31.71047	0.596	-91.0	81.9	30.5	53.5	50.9	125.84297
12	-17.772	-3.852	2034.47444	-59.5	19.0	-91.9	29.8	33.07647	0.521	-97.1	84.2	30.7	58.7	52.5	157.82607
13	-17.371	-10.622	1885.91238	-55.1	16.3	-87.6	32.7	30.71152	0.650	-96.4	77.8	34.4	49.5	41.4	195.85895
14	-17.142	-15.951	1788.40288	-49.5	13.7	-85.0	35.8	29.04191	0.745	-95.9	72.7	38.1	42.1	32.0	154.29764
15	-13.002	-16.969	1731.63460	-57.9	10.7	-83.1	30.1	28.21458	0.802	-90.8	71.3	37.9	36.9	32.2	128.87839
16	-9.489	-17.655	1698.19229	-67.3	8.5	-81.8	24.7	27.62123	0.838	-86.2	70.3	38.0	33.4	31.9	108.34177

JULY 31, 1964 13 HR 13 MIN 41 SEC 835 MS TAB NO 59 ATLAS PHOTO NO 59 POD SEQUENCE NO 121

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				726.964	1543.56903	-4.469	-33.443	3279.024	2.044	-73.001	116.730				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.977	-12.110	1807.06122	-62.9	12.5	-84.5	27.1	29.51058	0.713	-90.9	76.0	34.2	44.5	40.9	0.
3	-11.058	-15.097	1738.90717	-65.1	10.2	-82.8	25.8	28.36706	0.782	-88.3	72.9	36.1	38.6	36.3	105.87560
4	-10.946	-9.942	1838.28019	-68.9	11.7	-83.9	23.0	29.97908	0.684	-88.1	78.0	32.3	46.9	45.2	153.30874
5	-15.138	-8.540	1896.76385	-61.1	15.3	-87.2	28.4	30.94171	0.630	-93.8	79.6	32.4	51.0	46.1	133.54153
6	-15.004	-14.110	1786.74252	-56.4	13.1	-84.9	31.4	29.13841	0.734	-93.4	74.2	36.1	42.8	36.5	162.95687
7	-11.058	-15.097	1738.90717	-65.1	10.2	-82.8	25.8	28.36706	0.782	-88.3	72.9	36.1	38.6	36.3	123.00627
8	-9.506	-17.661	1687.73149	-67.2	8.5	-81.8	24.7	27.45110	0.838	-86.2	70.3	38.0	33.4	31.9	89.70890
9	-9.308	-13.042	1767.91661	-71.1	9.7	-82.4	21.9	28.80493	0.753	-85.8	74.8	34.3	41.2	40.3	138.15062
10	-9.096	-7.484	1884.16843	-73.9	10.9	-83.0	19.2	30.60948	0.643	-85.4	80.3	30.6	50.2	49.6	166.29051
11	-13.010	-6.147	1933.86876	-66.6	14.3	-86.5	24.3	31.50891	0.597	-91.0	81.8	30.5	53.4	50.8	125.02297
12	-17.734	-3.963	2021.26694	-59.5	18.9	-91.8	29.8	32.86177	0.523	-97.1	84.1	30.7	58.6	52.4	156.66078
13	-17.338	-10.677	1874.12306	-55.1	16.2	-87.6	32.7	30.51998	0.651	-96.4	77.7	34.4	49.5	41.3	194.25150
14	-17.111	-15.969	1777.35913	-49.5	13.7	-85.0	35.8	28.86264	0.746	-95.9	72.6	38.1	42.0	31.9	153.24994
15	-12.997	-16.979	1720.98761	-57.9	10.7	-83.1	30.1	28.04110	0.802	-90.8	71.2	37.9	36.9	32.2	128.06312
16	-9.506	-17.661	1687.73149	-67.2	8.5	-81.8	24.7	27.45110	0.838	-86.2	70.3	38.0	33.4	31.9	107.68090

JULY 31, 1964 13 HR 13 MIN 46 SEC 955 MS TAB NO 60 ATLAS PHOTO NO 60 POD SEQUENCE NO 123

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				721.844	1533.55560	-4.493	-33.395	3269.011	2.046	-72.966	116.724				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.972	-12.142	1795.95850	-62.9	12.5	-84.5	27.1	29.32927	0.714	-90.9	75.9	34.2	44.5	40.9	0.
3	-11.065	-15.110	1728.25137	-65.0	10.2	-82.8	25.8	28.19323	0.782	-88.3	72.9	36.1	38.6	36.3	105.20726
4	-10.953	-9.989	1826.93068	-68.8	11.7	-83.9	23.0	29.79387	0.685	-88.1	77.9	32.3	46.8	45.2	152.30629
5	-15.119	-8.598	1884.98943	-61.1	15.3	-87.1	28.4	30.74964	0.631	-93.8	79.5	32.4	51.0	46.0	132.69000
6	-14.986	-14.130	1775.78317	-56.4	13.1	-84.8	31.4	28.95969	0.734	-93.4	74.2	36.1	42.8	36.5	161.85856
7	-11.065	-15.110	1728.25137	-65.0	10.2	-82.8	25.8	28.19323	0.782	-88.3	72.9	36.1	38.6	36.3	122.24771
8	-9.522	-17.659	1677.37466	-67.2	8.5	-81.8	24.7	27.28265	0.838	-86.2	70.3	38.0	33.4	31.9	89.16713
9	-9.325	-13.069	1757.04456	-71.1	9.7	-82.4	21.9	28.62778	0.754	-85.8	74.8	34.3	41.2	40.3	137.28714
10	-9.115	-7.549	1872.40674	-73.8	10.9	-83.0	19.2	30.41843	0.644	-85.4	80.2	30.6	50.1	49.5	165.14080
11	-13.004	-6.222	1921.75937	-66.6	14.3	-86.5	24.3	31.31161	0.598	-91.0	81.7	30.5	53.4	50.7	124.22706
12	-17.697	-4.060	2008.37711	-59.5	18.9	-91.8	29.8	32.65222	0.525	-97.1	84.0	30.7	58.5	52.3	155.54273
13	-17.305	-10.721	1862.26444	-55.1	16.2	-87.6	32.7	30.33113	0.652	-96.4	77.7	34.4	49.4	41.3	192.75155
14	-17.081	-15.977	1766.43916	-49.5	13.6	-85.1	35.7	28.68534	0.746	-95.9	72.6	38.1	42.0	31.9	152.25253
15	-12.992	-16.980	1710.45134	-57.9	10.7	-83.1	30.1	27.86943	0.802	-90.8	71.2	37.9	36.9	32.2	127.26068
16	-9.522	-17.659	1677.37466	-67.2	8.5	-81.8	24.7	27.28265	0.838	-86.2	70.3	38.0	33.4	31.9	107.02815

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JULY 31, 1964 13 HR 13 MIN 52 SEC 75 MS

TAB NO 61

ATLAS PHOTO NO 61

POD SEQUENCE NO 125

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										716.724	1523.53299	-4.517	-33.347	3258.988	2.049	-72.930	116.718
PHOTC DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.967	-12.170	1784.95039	-62.9	12.5	-84.5	27.1	29.14950	0.714	-90.9	75.9	34.2	44.4	40.9	1-2		
3	-11.071	-5.119	1717.66869	-65.0	10.2	-82.6	25.8	28.02060	0.782	-88.3	72.9	36.1	38.6	36.3	2-3		
4	-10.960	-10.030	1815.68587	-68.8	11.7	-83.8	23.0	29.61050	0.685	-88.1	77.9	32.3	46.8	45.2	151.33416		
5	-15.100	-8.650	1873.34245	-61.1	15.3	-87.1	28.4	30.55964	0.631	-93.8	79.5	32.4	50.9	46.0	131.85212		
6	-14.969	-14.145	1764.90640	-56.4	13.1	-84.8	31.3	28.78229	0.734	-93.4	74.2	36.1	42.8	36.5	160.79690		
7	-11.071	-15.119	1717.66869	-55.0	10.2	-82.8	25.8	28.02060	0.782	-88.3	72.9	36.1	38.6	36.3	121.49674		
8	-9.538	-17.653	1667.07561	-67.2	8.5	-81.8	24.8	27.11514	0.838	-86.2	70.3	38.0	33.4	31.9	88.63642		
9	-9.343	-13.090	1746.25815	-71.0	9.8	-82.3	22.0	28.45204	0.754	-85.8	74.7	34.3	41.2	40.3	136.44486		
10	-9.133	-7.608	1860.77806	-73.8	10.9	-83.0	19.3	30.22959	0.644	-85.4	80.2	30.6	50.1	49.5	164.03088		
11	-12.998	-6.290	1909.80241	-66.6	14.3	-86.5	24.4	31.11680	0.599	-91.0	81.6	30.4	53.3	50.7	123.44526		
12	-17.661	-4.149	1995.67361	-59.5	18.9	-91.7	29.8	32.44570	0.526	-97.1	83.9	30.7	58.4	52.2	154.45314		
13	-17.273	-10.759	1851.03511	-55.1	16.2	-87.5	32.7	30.14405	0.652	-96.4	77.6	34.4	49.4	41.2	191.31653		
14	-17.050	-15.941	1755.58830	-49.5	13.6	-85.1	35.7	28.50916	0.746	-95.9	72.6	38.1	42.0	31.9	151.28500		
15	-12.987	-16.978	1699.97649	-57.9	10.7	-83.1	30.1	27.69875	0.801	-90.8	71.2	37.9	36.9	32.2	126.46548		
16	-9.538	-17.653	1667.07561	-67.2	8.5	-81.8	24.8	27.11514	0.838	-86.2	70.3	38.0	33.4	31.9	106.37996		

JULY 31, 1964 13 HR 13 MIN 57 SEC 195 MS

TAB NO 62

ATLAS PHOTO NO 62

POD SEQUENCE NO 127

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										711.604	1513.50125	-4.542	-33.298	3248.957	2.051	-72.893	116.712
PHOTC DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.962	-12.197	1773.92366	-62.9	12.5	-84.5	27.1	28.96942	0.714	-90.9	75.9	34.2	44.4	40.9	1-2		
3	-11.078	-5.128	1707.06868	-65.0	10.3	-82.8	25.8	27.84768	0.782	-88.3	72.9	36.1	38.6	36.3	103.90271		
4	-10.967	-10.072	1804.42223	-68.8	11.7	-83.8	23.1	29.42682	0.685	-88.1	77.8	32.3	46.8	45.1	150.36014		
5	-15.081	-8.702	1861.67592	-61.1	15.3	-87.1	28.4	30.36933	0.632	-93.8	79.4	32.4	50.9	46.0	131.01259		
6	-14.951	-14.160	1754.00731	-56.4	13.1	-84.8	31.3	28.60458	0.735	-93.4	74.2	36.1	42.8	36.5	159.73363		
7	-11.078	-15.128	1707.06868	-55.0	10.3	-82.8	25.8	27.84768	0.782	-88.3	72.9	36.1	38.6	36.3	120.74438		
8	-9.554	-17.647	1656.76054	-67.1	8.5	-81.8	24.8	26.94736	0.838	-86.2	70.3	38.0	33.4	32.0	88.10440		
9	-9.360	-13.112	1735.45418	-71.0	9.8	-82.3	22.0	28.27603	0.754	-85.8	74.7	34.3	41.2	40.2	135.60081		
10	-9.151	-7.667	1849.13306	-73.7	11.0	-83.0	19.3	30.04045	0.645	-85.4	80.1	30.6	50.0	49.4	162.91964		
11	-12.992	-6.359	1897.82616	-66.5	14.3	-86.5	24.4	30.92167	0.600	-91.0	81.6	30.4	53.2	50.6	122.66207		
12	-17.624	-4.238	1982.95219	-59.5	18.8	-91.6	29.8	32.23889	0.527	-97.1	83.8	30.7	58.3	52.1	153.36341		
13	-17.241	-10.797	1839.52655	-55.1	16.1	-87.5	32.7	29.95666	0.653	-96.4	77.6	34.4	49.3	41.2	189.88197		
14	-17.019	-15.985	1744.71982	-49.6	13.6	-85.1	35.7	28.33269	0.746	-95.9	72.6	38.1	42.0	31.9	150.31557		
15	-12.982	-16.975	1689.46474	-57.9	10.7	-83.1	30.1	27.52781	0.801	-90.8	71.2	37.9	36.9	32.2	125.66891		
16	-9.554	-17.647	1656.76054	-67.1	8.5	-81.8	24.8	26.94736	0.838	-86.2	70.3	38.0	33.4	32.0	105.73071		

JULY 31, 1964 13 HR 14 MIN 2 SEC 315 MS

TAB NO 63

ATLAS PHOTO NO 63

POD SEQUENCE NO 129

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										706.465	1503.46042	-4.566	-33.249	3238.916	2.053	-72.857	116.706
PHOTC DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.957	-12.223	1762.91412	-62.8	12.5	-84.5	27.2	28.78963	0.714	-90.9	75.9	34.2	44.4	40.8	1-2		
3	-11.084	-5.136	1696.48003	-65.0	10.3	-82.8	25.8	27.67495	0.782	-88.3	72.9	36.0	38.6	36.3	103.25391		
4	-10.974	-10.112	1793.18132	-68.8	11.7	-83.8	23.1	29.24351	0.686	-88.1	77.8	32.3	46.8	45.1	149.39431		
5	-15.063	-8.752	1850.03627	-61.1	15.2	-87.1	26.4	30.17946	0.632	-93.8	79.4	32.4	50.8	45.9	130.17656		
6	-14.934	-14.174	1743.12331	-56.5	13.1	-84.8	31.3	28.42709	0.735	-93.5	74.1	36.1	42.8	36.5	158.68063		
7	-11.084	-15.136	1696.48003	-65.0	10.3	-82.8	25.8	27.67495	0.782	-88.3	72.9	36.0	38.6	36.3	119.99343		
8	-9.570	-17.639	1646.45299	-67.1	8.5	-81.6	24.8	26.77971	0.838	-86.2	70.3	38.0	33.5	32.0	87.57492		
9	-9.377	-13.133	1724.66589	-70.9	9.8	-82.3	22.0	28.10026	0.754	-85.8	74.7	34.3	41.2	40.2	134.76211		
10	-12.986	-6.425	1885.88461	-66.5	14.3	-86.4	24.4	29.85180	0.646	-85.4	80.0	30.5	50.0	49.4	161.81992		
11	-17.588	-4.325	1970.27678	-59.5	18.8	-91.6	29.8	30.72711	0.600	-91.0	81.5	30.4	53.2	50.6	121.88226		
12	-17.208	-10.834	1828.03937	-55.2	16.1	-87.5	32.6	32.03283	0.528	-97.1	83.8	30.7	58.3	52.0	152.28243		
13	-16.989	-15.988	1733.86127	-49.6	13.6	-85.1	35.6	29.76962	0.653	-96.4	77.5	34.4	49.3	41.2	188.46769		
14	-12.977	-16.971	1679.00099	-57.9	10.7	-83.1	30.1	27.35699	0.801	-90.8	71.3	37.9	36.9	32.2	124.87378		
15	-9.570	-17.639	1646.45299	-67.1	8.5	-81.8	24.8	26.77971	0.838	-86.2	70.3	38.0	33.5	32.0	105.08183		

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JULY 31, 1964 13 HR 14 MIN 7 SEC 435 MS TAB NO 64 ATLAS PHOTO NO 64 POD SEQUENCE NO 131

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				701.365	1493.41037	-4.591	-33.200	3228.866	2.056	-72.820	116.699				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.951	-12.249	1751.90182	-62.8	12.5	-84.4	27.2	28.60979	0.714	-90.9	75.8	34.2	44.4	40.8	0.
3	-11.091	-15.143	1685.88681	-65.0	10.3	-82.8	25.9	27.50214	0.782	-88.3	72.9	36.0	38.6	36.3	102.60614
4	-10.981	-10.151	1781.94003	-68.7	11.7	-83.8	23.1	29.06019	0.686	-88.1	77.8	32.3	46.7	45.1	148.43117
5	-15.044	-8.801	1638.39761	-61.1	15.2	-87.1	28.4	29.98960	0.633	-93.8	79.3	32.4	50.8	45.9	129.34102
6	-14.916	-14.187	1732.23494	-56.5	13.1	-84.8	31.3	28.24953	0.735	-93.5	74.1	36.1	42.8	36.5	157.63119
7	-11.091	-15.143	1685.88681	-65.0	10.3	-82.8	25.9	27.50214	0.782	-88.3	72.9	36.0	38.6	36.3	119.24224
8	-9.586	-17.632	1636.13988	-67.1	8.6	-81.8	24.8	26.61197	0.837	-86.2	70.3	38.0	33.5	32.0	87.04586
9	-9.393	-13.153	1713.67477	-70.9	9.8	-82.3	22.1	27.92445	0.754	-85.8	74.7	34.3	41.2	40.2	133.97480
10	-9.187	-7.780	1825.90774	-73.7	11.0	-82.3	19.4	29.06321	0.646	-85.4	80.0	30.5	49.9	49.3	160.72448
11	-12.980	-6.491	1873.94766	-66.5	14.3	-86.4	24.4	30.53262	0.601	-91.0	81.4	30.4	53.1	50.5	121.10333
12	-17.551	-4.411	1957.61156	-59.5	18.7	-91.5	29.8	31.82693	0.529	-97.1	83.7	30.7	58.2	51.9	151.20500
13	-17.175	-10.870	1816.55103	-55.2	16.1	-87.5	32.6	29.58255	0.654	-96.4	77.5	34.4	49.3	41.2	187.06238
14	-16.958	-15.990	1722.99734	-49.7	13.6	-85.1	35.6	27.97997	0.746	-95.9	72.6	38.1	42.0	32.0	148.39528
15	-12.971	-16.967	1668.51138	-57.9	10.7	-83.1	30.0	27.18607	0.801	-90.8	71.3	37.9	36.9	32.2	124.07844
16	-9.586	-17.632	1636.13988	-67.1	8.6	-81.8	24.8	26.61197	0.837	-86.2	70.3	38.0	33.5	32.0	104.43278

JULY 31, 1964 13 HR 14 MIN 12 SEC 555 MS TAB NO 65 ATLAS PHOTO NO 65 POD SEQUENCE NO 133

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				696.245	1483.35107	-4.616	-33.150	3218.806	2.058	-72.783	116.693				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.946	-12.274	1740.86983	-62.8	12.5	-84.4	27.2	28.62963	0.715	-90.9	75.8	34.1	44.4	40.8	0.
3	-11.097	-15.151	1675.27542	-65.0	10.3	-82.8	25.9	27.32903	0.782	-88.3	72.9	36.0	38.6	36.3	101.95676
4	-10.988	-10.191	1770.67877	-68.7	11.7	-83.8	23.1	28.87655	0.686	-88.1	77.7	32.3	46.7	45.0	147.46591
5	-15.024	-8.851	1626.73813	-61.1	15.2	-87.0	28.4	29.79940	0.633	-93.8	79.3	32.3	50.7	45.8	128.50394
6	-14.898	-14.201	1721.32748	-56.5	13.1	-84.8	31.3	28.07165	0.735	-93.5	74.1	36.1	42.8	36.5	156.57966
7	-11.097	-15.151	1675.27542	-65.0	10.3	-82.8	25.9	27.32903	0.782	-88.3	72.9	36.0	38.6	36.3	118.48957
8	-9.601	-17.624	1625.81012	-67.1	8.6	-81.8	24.8	26.44396	0.837	-86.2	70.3	38.0	33.5	32.0	86.51529
9	-9.410	-13.174	1703.06511	-70.9	9.8	-82.3	22.1	27.74833	0.754	-85.8	74.7	34.2	41.2	40.2	133.08545
10	-9.205	-7.837	1814.27609	-73.6	11.0	-82.9	19.5	29.47429	0.647	-85.4	79.9	30.5	49.9	49.3	159.62730
11	-12.974	-6.557	1861.98994	-66.5	14.3	-86.4	24.4	30.33780	0.602	-91.0	81.4	30.4	53.1	50.4	120.32276
12	-17.515	-4.497	1944.92645	-59.5	18.7	-91.5	29.8	31.62071	0.531	-97.1	83.6	30.7	58.1	51.8	150.12739
13	-17.143	-10.907	1805.04234	-55.2	16.1	-87.5	32.6	29.39515	0.654	-96.4	77.5	34.4	49.2	41.1	185.65676
14	-16.926	-15.993	1712.11910	-49.7	13.6	-85.1	35.5	27.80327	0.746	-95.9	72.6	38.1	42.0	32.0	147.43414
15	-12.966	-16.963	1658.00417	-56.0	10.7	-83.1	30.0	27.01487	0.801	-90.8	71.3	37.9	36.9	32.3	123.28182
16	-9.601	-17.624	1625.81012	-67.1	8.6	-81.8	24.8	26.44396	0.837	-86.2	70.3	38.0	33.5	32.0	103.78229

JULY 31, 1964 13 HR 14 MIN 17 SEC 675 MS TAB NO 66 ATLAS PHOTO NO 66 POD SEQUENCE NO 135

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				691.125	1473.28241	-4.641	-33.100	3208.738	2.060	-72.746	116.686				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.940	-12.305	1729.74060	-62.8	12.5	-84.4	27.2	28.24788	0.715	-90.9	75.8	34.1	44.4	40.8	0.
3	-11.103	-15.162	1664.58374	-65.0	10.3	-82.8	25.9	27.15462	0.782	-88.3	72.9	36.0	38.6	36.3	101.29334
4	-10.994	-10.236	1759.30797	-68.7	11.7	-83.8	23.2	28.69112	0.687	-88.1	77.7	32.3	46.7	45.0	146.47702
5	-15.005	-8.906	1614.95784	-61.1	15.2	-87.0	28.4	29.60723	0.634	-93.8	79.2	32.3	50.7	45.8	127.65534
6	-14.880	-14.218	1710.33307	-56.5	13.1	-84.8	31.3	27.89236	0.735	-93.5	74.1	36.1	42.8	36.5	155.50036
7	-11.103	-15.162	1664.58374	-65.0	10.3	-82.8	25.9	27.15462	0.782	-88.3	72.9	36.0	38.6	36.3	117.72923
8	-9.617	-17.621	1615.41290	-67.0	8.6	-81.8	24.9	26.27485	0.837	-86.2	70.3	38.0	33.5	32.0	85.97484
9	-9.427	-13.198	1692.16481	-70.8	9.8	-82.3	22.1	27.57074	0.754	-85.8	74.7	34.2	41.2	40.2	132.22846
10	-9.223	-7.899	1802.51964	-73.6	11.0	-82.9	19.5	29.28335	0.647	-85.4	79.9	30.5	49.8	49.2	158.50094
11	-12.968	-6.629	1849.89529	-66.5	14.3	-86.3	24.5	30.14074	0.603	-91.0	81.3	30.4	53.0	50.4	119.53039
12	-17.477	-4.500	1932.08421	-59.5	18.7	-91.4	29.8	31.41193	0.532	-97.1	83.5	30.7	58.0	51.7	149.03060
13	-17.109	-10.948	1793.42572	-55.2	16.0	-87.5	32.6	29.20600	0.655	-96.4	77.4	34.4	49.2	41.1	184.20860
14	-16.895	-15.999	1701.15472	-49.7	13.6	-85.1	35.5	27.62532	0.747	-95.9	72.6	38.1	42.0	32.0	146.44953
15	-12.960	-16.963	1647.45528	-58.0	10.7	-83.1	30.0	26.84250	0.801	-90.8	71.3	37.9	36.9	32.3	122.47796
16	-9.617	-17.621	1615.41290	-67.0	8.6	-81.8	24.9	26.27485	0.837	-86.2	70.3	38.0	33.5	32.0	103.12663

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JULY 31, 1964 13 HR 14 MIN 22 SEC 794 MS

TAB NO 67

ATLAS PHOTO NO 67

POD SEQUENCE NO 137

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LGN	R	V	PTH	AZ						
PHOTO DATA		686.005	1463.20444	-4.666	-33.050	3198.660	2.063	-72.709	116.680						
PT	LAT	LGN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.934	-12.337	1718.56837	-62.8	12.5	-84.4	27.2	28.06543	0.715	-90.9	75.8	34.1	44.3	40.8	0.
3	-11.109	-15.175	1653.85507	-64.9	10.3	-82.8	25.9	26.97960	0.782	-88.3	72.8	36.0	38.6	36.3	100.62473
4	-11.001	-10.282	1747.89034	-68.7	11.7	-83.7	23.2	28.50493	0.687	-88.1	77.6	32.3	46.7	45.0	145.47968
5	-14.985	-8.963	1803.12701	-61.1	15.2	-87.0	28.4	29.44424	0.635	-93.8	79.2	32.3	50.6	45.7	126.80234
6	-14.861	-14.238	1699.29907	-56.5	13.1	-84.8	31.2	27.71242	0.735	-93.5	74.1	36.1	42.7	36.4	154.41158
7	-11.109	-15.175	1653.85507	-64.9	10.3	-82.8	25.9	26.97960	0.782	-88.3	72.8	36.0	38.6	36.3	116.96582
8	-9.633	-17.618	1604.98357	-67.0	8.6	-81.8	24.9	26.10522	0.837	-86.2	70.3	37.9	33.5	32.0	85.43033
9	-9.444	-13.224	1681.22420	-70.8	9.8	-82.3	22.2	27.39250	0.754	-85.8	74.6	34.2	41.2	40.2	131.36479
10	-9.241	-7.963	1790.71194	-73.5	11.0	-82.9	19.6	29.09158	0.648	-85.4	79.8	30.5	49.8	49.2	157.36493
11	-12.961	-6.703	1837.74548	-66.5	14.2	-86.3	24.5	29.94279	0.604	-91.0	81.2	30.4	53.0	50.3	118.73372
12	-17.440	-4.685	1919.18181	-59.5	18.6	-91.3	29.8	31.20218	0.533	-97.1	83.4	30.7	57.9	51.6	147.92797
13	-17.466	-10.991	1781.76253	-55.2	16.0	-87.5	32.5	29.01669	0.655	-96.4	77.4	34.4	49.2	41.0	182.74818
14	-16.863	-16.007	1690.15788	-49.8	13.5	-85.1	35.4	27.44677	0.747	-95.9	72.6	38.1	42.0	32.0	145.45648
15	-12.954	-16.964	1636.81229	-58.0	10.7	-83.1	30.0	26.66958	0.801	-90.8	71.3	37.9	36.9	32.3	121.67094
16	-9.633	-17.618	1604.98357	-67.0	8.6	-81.8	24.9	26.10522	0.837	-86.2	70.3	37.9	33.5	32.0	102.46844

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TAB NO 68

ATLAS PHOTO NO 68

POD SEQUENCE NO 139

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LGN	R	V	PTH	AZ						
PHOTO DATA		680.885	1453.11691	-4.691	-33.000	3188.572	2.065	-72.672	116.673						
PT	LAT	LGN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.928	-12.369	1707.37747	-62.8	12.5	-84.4	27.2	27.88268	0.715	-90.9	75.7	34.1	44.3	40.7	0.
3	-11.115	-15.188	1643.10887	-64.9	10.3	-82.8	25.9	26.80430	0.782	-88.3	72.8	36.0	38.6	36.3	99.95468
4	-11.008	-10.329	1736.45416	-68.6	11.7	-83.7	23.2	28.31844	0.688	-88.1	77.6	32.3	46.6	44.9	144.48086
5	-14.966	-9.021	1791.27707	-61.1	15.1	-87.0	28.4	29.22054	0.635	-93.8	79.1	32.3	50.5	45.7	125.94799
6	-14.843	-14.257	1688.24667	-56.5	13.0	-84.8	31.2	27.53219	0.735	-93.5	74.1	36.1	42.7	36.4	153.32145
7	-11.115	-15.188	1643.10887	-64.9	10.3	-82.8	25.9	26.80430	0.782	-88.3	72.8	36.0	38.6	36.3	116.20093
8	-9.648	-17.616	1594.53789	-67.0	8.6	-81.8	24.9	25.93532	0.837	-86.2	70.3	37.9	33.5	32.0	84.88455
9	-9.460	-13.251	1670.26599	-70.8	9.9	-82.3	22.2	27.21397	0.754	-85.8	74.6	34.2	41.1	40.2	130.49953
10	-9.259	-8.027	1778.88641	-73.5	11.0	-82.9	19.6	28.89951	0.649	-85.4	79.8	30.5	49.7	49.1	156.22799
11	-12.954	-6.777	1825.57716	-66.4	14.2	-86.3	24.5	29.74453	0.605	-91.0	81.2	30.4	52.9	50.2	117.93560
12	-17.402	-4.779	1906.26277	-59.5	18.6	-91.3	29.8	30.99216	0.534	-97.1	83.3	30.7	57.8	51.5	146.82584
13	-17.042	-11.035	1770.08041	-55.2	16.0	-87.4	32.5	28.82588	0.656	-96.5	77.3	34.4	49.1	41.0	181.28901
14	-16.832	-16.016	1679.14319	-49.8	13.5	-85.1	35.4	27.26794	0.747	-95.9	72.6	38.1	41.9	32.0	144.46185
15	-12.948	-16.965	1626.18207	-58.0	10.7	-83.1	30.0	26.49638	0.801	-90.8	71.3	37.9	37.0	32.3	120.86261
16	-9.648	-17.616	1594.53789	-67.0	8.6	-81.8	24.9	25.93532	0.837	-86.2	70.3	37.9	33.5	32.0	101.80901

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TAB NO 69

ATLAS PHOTO NO 69

POD SEQUENCE NO 141

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LGN	R	V	PTH	AZ						
PHOTO DATA		675.765	1443.02014	-4.717	-32.949	3178.475	2.067	-72.634	116.667						
PT	LAT	LGN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.922	-12.404	1696.12700	-62.8	12.5	-84.4	27.2	27.68995	0.716	-90.9	75.7	34.1	44.3	40.7	0.
3	-11.121	-15.204	1632.31229	-64.9	10.3	-82.8	25.9	26.62818	0.782	-88.3	72.8	36.0	38.6	36.3	99.27690
4	-11.014	-10.378	1724.95219	-68.6	11.6	-83.7	23.3	28.13088	0.688	-88.1	77.5	32.3	46.6	44.9	143.46923
5	-14.946	-9.081	1779.35541	-61.1	15.1	-86.9	28.4	29.02646	0.636	-93.8	79.1	32.3	50.5	45.6	125.08722
6	-14.824	-14.279	1677.14018	-56.5	13.0	-84.8	31.2	27.35167	0.736	-93.5	74.0	36.1	42.7	36.4	152.21653
7	-11.121	-15.204	1632.31229	-64.9	10.3	-82.8	25.9	26.62818	0.782	-88.3	72.8	36.0	38.6	36.3	115.43165
8	-9.664	-17.616	1584.04910	-67.0	8.6	-81.7	24.9	25.76473	0.837	-86.2	70.3	37.9	33.6	32.1	84.33299
9	-9.477	-13.280	1659.25201	-70.7	9.9	-82.2	22.2	27.03454	0.754	-85.8	74.6	34.2	41.1	40.1	129.62430
10	-9.277	-8.095	1766.98735	-73.5	11.0	-82.9	19.7	28.70626	0.649	-85.4	79.7	30.5	49.7	49.1	155.07582
11	-12.948	-6.854	1813.32930	-66.4	14.2	-86.3	24.5	29.54498	0.605	-91.0	81.1	30.4	52.8	50.2	117.13097
12	-17.364	-4.878	1893.25500	-59.5	18.5	-91.2	29.8	30.78069	0.536	-97.1	83.2	30.7	57.8	51.4	145.71413
13	-17.009	-11.081	1758.33318	-55.2	16.0	-87.4	32.5	28.63461	0.657	-96.5	77.3	34.4	49.1	41.0	179.80906
14	-16.800	-16.026	1688.07918	-49.8	13.5	-85.1	35.4	27.08830	0.747	-95.9	72.6	38.1	41.9	32.0	143.45443
15	-12.943	-16.969	1615.50609	-58.0	10.7	-83.1	30.0	26.32243	0.801	-90.8	71.3	37.9	37.0	32.3	120.04996
16	-9.664	-17.616	1584.04910	-67.0	8.6	-81.7	24.9	25.76473	0.837	-86.2	70.3	37.9	33.6	32.1	101.14627

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JULY 31, 1964 13 HR 14 MIN 38 SEC 154 MS

TAB NO 70 ATLAS PHOTO NO 70 POD SEQUENCE NO 143

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				670.645		1432.91370	-4.742	-32.897	3168.369	2.070	-72.596	116.660		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-12.916	-12.439	1684.84987	-62.8	12.5	-84.4	27.2	27.51479	0.716	-90.9	75.7 34.1	44.3 40.7	0.	1- 2
3	-11.127	-15.220	1621.49164	-64.9	10.3	-82.7	26.0	26.45166	0.782	-88.3	72.8 36.0	38.6 36.2	98.59656	2- 3
4	-11.021	-10.429	1713.42247	-68.6	11.8	-83.7	23.3	27.94286	0.689	-88.1	77.5 32.3	46.5 44.8	142.45399	3- 4
5	-14.926	-9.142	1767.40456	-61.1	15.1	-86.9	28.5	28.83151	0.637	-93.8	79.0 32.3	50.5 45.6	124.22401	4- 5
6	-14.806	-14.302	1666.00815	-56.5	13.0	-84.8	31.2	27.16954	0.736	-93.5	74.0 36.0	42.7 36.4	151.10790	5- 6
7	-11.127	-15.220	1621.49164	-64.9	10.3	-82.7	26.0	26.45166	0.782	-88.3	72.8 36.0	38.6 36.2	114.66023	6- 7
8	-9.680	-17.616	1573.53860	-66.9	8.6	-81.7	25.0	25.59378	0.836	-86.2	70.3 37.9	33.6 32.1	83.77919	7- 8
9	-9.494	-13.309	1648.21288	-70.7	9.9	-82.2	22.3	26.85470	0.755	-85.8	74.6 34.2	41.1 40.1	138.74481	8- 9
10	-9.295	-8.162	1755.05980	-73.4	11.0	-82.8	19.7	28.51255	0.650	-85.4	79.6 30.5	49.6 49.0	153.92017	9- 10
11	-12.941	-6.932	1801.05127	-66.4	14.2	-86.2	24.6	29.34494	0.606	-91.0	81.0 30.4	52.8 50.1	116.32413	10- 11
12	-17.326	-4.977	1880.21722	-59.5	18.5	-91.2	29.8	30.56874	0.537	-97.1	83.0 30.6	57.7 51.3	144.60112	11- 12
13	-16.975	-11.128	1746.55801	-55.3	15.9	-87.4	32.5	28.44289	0.657	-96.5	77.2 34.4	49.0 40.9	178.32665	12- 13
14	-16.768	-16.037	1656.99103	-49.9	13.5	-85.1	35.4	26.90828	0.747	-95.9	72.6 38.1	41.9 32.0	142.44332	13- 14
15	-12.937	-16.973	1604.80711	-58.0	10.7	-83.1	30.0	26.14810	0.801	-90.8	71.3 37.8	37.0 32.3	119.23553	14- 15
16	-9.680	-17.616	1573.53860	-66.9	8.6	-81.7	25.0	25.59378	0.836	-86.2	70.3 37.9	33.6 32.1	100.48178	15- 16

TAB NO 71 ATLAS PHOTO NO 71 POD SEQUENCE NO 145

JULY	31,1964	13 HR 14 MIN 43 SEC 274 MS	TAB NO		ALIAS PHOTO NO		PT		R		V		PTH		AZ		
TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R		V		PTH		AZ		
				665.525		1422.79791	-4.768	-32.846	3158.253		2.072		-72.558		116.654		
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.910	-12.475	1673.55511	-62.8	12.5	-84.4	27.2	27.33033	0.716	-90.9	75.6	34.1	44.2	40.6	0.	1- 2	
3	-11.133	-15.236	1610.65428	-64.9	10.3	-82.7	26.0	26.27487	0.782	-88.3	72.8	36.0	38.6	36.2	97.91494	2- 3	
4	-11.027	-10.479	1701.87549	-68.5	11.8	-83.7	23.3	27.75456	0.689	-88.1	77.4	32.2	46.5	44.8	141.43754	3- 4	
5	-14.905	-9.203	1755.43608	-61.0	15.1	-86.9	28.5	28.63627	0.638	-93.8	78.9	32.3	50.4	45.5	123.35975	4- 5	
6	-14.787	-14.325	1654.85869	-56.5	13.0	-84.8	31.2	26.98732	0.736	-93.5	74.0	36.0	42.7	36.4	149.99841	5- 6	
7	-11.133	-15.236	1610.65428	-64.9	10.3	-82.7	26.0	26.27487	0.782	-88.3	72.8	36.0	38.6	36.2	113.88749	6- 7	
8	-9.695	-17.616	1563.01236	-66.9	8.7	-81.7	25.0	25.42257	0.836	-86.2	70.3	37.9	33.6	32.1	83.22446	7- 8	
9	-9.511	-13.339	1637.15704	-70.6	9.9	-82.2	22.3	26.67458	0.755	-85.8	74.5	34.2	41.1	40.1	127.86598	8- 9	
10	-9.311	-8.231	1743.11592	-73.4	11.1	-82.8	19.8	28.31857	0.651	-85.4	79.6	30.5	49.6	48.9	152.76405	9- 10	
11	-12.934	-7.011	1788.75664	-66.4	14.2	-86.2	24.6	29.14463	0.607	-91.0	80.9	30.4	52.7	50.0	115.51626	10- 11	
12	-17.288	-5.076	1867.16510	-59.5	18.4	-91.1	29.8	30.35656	0.539	-97.1	83.0	30.6	57.6	51.2	143.48880	11- 12	
13	-16.941	-11.175	1734.76515	-55.3	15.9	-87.4	32.5	28.25067	0.658	-96.5	77.2	34.3	49.0	40.9	176.84637	12- 13	
14	-16.736	-16.049	1645.88580	-49.9	13.5	-85.1	35.3	26.72798	0.748	-95.9	72.5	38.1	41.9	32.0	141.43100	13- 14	
15	-12.930	-16.977	1594.09157	-58.0	10.7	-83.1	30.0	25.97351	0.801	-90.8	71.2	37.8	37.0	32.3	118.41971	14- 15	
16	-9.695	-17.616	1563.01236	-66.9	8.7	-81.7	25.0	25.42257	0.836	-86.2	70.3	37.9	33.6	32.1	99.81627	15- 16	

TAB NO 72 ATLAS PHOTO NO 72 POD SEQUENCE NO 147

JULY 31,1964 13 HR 14 MIN 48 SEC 394 MS										TAB NO 72		WIDE AREA									
TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				660.405				1412.67239		-4.794		-32.794		3148.128		2.074		-72.520		116.647	
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-12.904	-12.511	1662.24225	-62.8	12.4	-84.4	27.2	27.14559	0.717	-90.9	75.6	34.1	44.2	40.6	0.	1- 2					
3	-11.139	-15.253	1599.79959	-64.8	10.3	-82.7	26.0	26.09780	0.782	-88.3	72.8	36.0	38.6	36.2	97.23236	2- 3					
4	-11.033	-10.530	1690.31065	-68.5	11.8	-83.7	23.4	27.56557	0.690	-88.1	77.4	32.2	46.5	44.7	140.41993	3- 4					
5	-14.885	-9.265	1743.44952	-61.0	15.1	-86.9	28.5	26.44074	0.638	-93.8	78.9	32.3	50.4	45.4	122.49454	4- 5					
6	-14.768	-14.348	1643.69121	-56.6	13.0	-84.8	31.2	26.80561	0.736	-93.5	74.0	36.0	42.6	36.4	148.88805	5- 6					
7	-11.139	-15.253	1599.79959	-64.8	10.3	-82.7	26.0	26.09780	0.782	-88.3	72.8	36.0	38.6	36.2	113.11354	6- 7					
8	-9.710	-17.617	1552.46396	-66.9	8.7	-81.7	25.0	25.25111	0.836	-86.2	70.3	37.9	33.6	32.1	82.66829	7- 8					
9	-9.527	-13.369	1626.08392	-70.6	9.9	-82.2	22.4	26.49418	0.755	-85.8	74.5	34.2	41.1	40.1	126.98455	8- 9					
10	-9.331	-8.299	1731.15521	-73.3	11.1	-82.8	19.8	28.12432	0.652	-85.4	79.5	30.5	49.5	48.9	151.60763	9- 10					
11	-12.927	-7.089	1776.44482	-66.4	14.2	-86.2	24.6	28.94403	0.608	-91.0	80.9	30.4	52.6	49.9	114.70731	10- 11					
12	-17.250	-5.176	1854.09801	-59.5	18.4	-91.0	29.8	30.14413	0.540	-97.1	82.9	30.6	57.5	51.1	142.37691	11- 12					
13	-16.906	-11.222	1722.95406	-55.3	15.9	-87.4	32.5	28.05856	0.659	-96.5	77.2	34.3	48.9	40.8	175.36815	12- 13					
14	-16.703	-16.061	1634.76295	-49.9	13.5	-85.1	35.3	26.54732	0.748	-95.9	72.5	38.0	41.9	31.9	140.41745	13- 14					
15	-12.924	-16.982	1583.35893	-58.0	10.7	-83.1	30.0	25.79864	0.801	-90.8	71.2	37.8	37.0	32.3	117.60269	14- 15					
16	-9.710	-17.617	1552.46396	-66.9	8.7	-81.7	25.0	25.25111	0.836	-86.2	70.3	37.9	33.6	32.1	99.14942	15- 16					

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JULY 31, 1964 13 HR 14 MIN 53 SEC 514 MS TAB NO 73 ATLAS PHOTO NO 73 POD SEQUENCE NO 149

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				655.286		1402.53720	-4.820	-32.742	3137.992	2.077	-72.481	116.640				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.897	-12.547	1650.91167	-62.7	12.4	-84.4	27.3	26.96054	0.717	-90.9	75.5	34.1	44.2	40.6	0.	1-2
3	-11.145	-15.269	1588.92751	-64.8	10.3	-82.7	26.0	25.92044	0.782	-88.3	72.8	36.0	38.6	36.2	96.54848	2-3
4	-11.039	-10.581	1678.72787	-68.5	11.8	-83.6	23.4	27.37709	0.690	-88.1	77.3	32.2	46.4	44.7	139.40117	3-4
5	-14.865	-9.326	1731.44466	-61.0	15.0	-86.8	28.5	28.24491	0.639	-93.8	78.8	32.3	50.3	45.4	121.62788	4-5
6	-14.749	-14.372	1632.50555	-56.6	13.0	-84.8	31.2	26.62321	0.737	-93.5	73.9	36.0	42.6	36.3	147.77678	5-6
7	-11.145	-15.269	1588.92751	-64.8	10.3	-82.7	26.0	25.92044	0.782	-88.3	72.8	36.0	38.6	36.2	112.31817	6-7
8	-9.726	-17.618	1541.91122	-66.8	8.7	-81.7	25.0	25.07937	0.836	-86.2	70.3	37.9	33.6	32.1	82.11098	7-8
9	-9.544	-13.399	1614.99347	-70.6	9.9	-82.2	22.4	26.31350	0.755	-85.8	74.5	34.2	41.1	40.0	126.10173	8-9
10	-9.348	-8.366	1719.17746	-73.3	11.1	-82.8	19.9	27.92979	0.653	-85.4	79.4	30.5	49.4	48.8	150.45066	9-10
11	-12.920	-7.168	1764.11559	-66.3	14.2	-86.1	24.6	26.74316	0.609	-91.0	80.8	30.4	52.6	49.9	113.89729	10-11
12	-17.211	-5.276	1841.01581	-59.5	18.3	-91.0	29.8	29.93146	0.542	-97.2	82.8	30.6	57.4	51.0	141.26564	11-12
13	-16.872	-11.270	1711.12457	-55.3	15.8	-87.4	32.4	27.86595	0.659	-96.5	77.1	34.3	48.9	40.8	173.89202	12-13
14	-16.671	-16.073	1623.62245	-49.9	13.4	-85.1	35.3	26.36552	0.748	-95.9	72.5	38.0	41.8	31.9	139.40253	13-14
15	-12.918	-16.987	1572.60909	-58.0	10.7	-83.1	30.0	25.62348	0.801	-90.8	71.2	37.8	37.0	32.3	116.78466	14-15
16	-9.726	-17.618	1541.91122	-66.8	8.7	-81.7	25.0	25.07937	0.836	-86.2	70.3	37.9	33.6	32.1	98.48126	15-16

JULY 31, 1964 13 HR 14 MIN 58 SEC 634 MS TAB NO 74 ATLAS PHOTO NO 74 POD SEQUENCE NO 151

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				450.166		1392.39246	-4.847	-32.689	3127.848	2.079	-72.442	116.634				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.891	-12.584	1639.56212	-62.7	12.4	-84.3	27.3	26.77520	0.718	-90.9	75.5	34.1	44.1	40.6	0.	1-2
3	-11.150	-15.286	1578.03847	-64.8	10.3	-82.7	26.0	25.74261	0.782	-88.3	72.7	36.0	38.6	36.2	95.86349	2-3
4	-11.046	-10.632	1667.12759	-68.5	11.8	-83.6	23.4	27.18793	0.691	-88.1	77.3	32.2	46.4	44.7	138.38122	3-4
5	-14.844	-9.369	1719.42212	-61.0	15.0	-86.8	28.5	28.04879	0.640	-93.8	78.8	32.3	50.3	45.3	120.76030	4-5
6	-14.729	-14.395	1621.30223	-56.6	13.0	-84.8	31.2	26.44051	0.737	-93.5	73.9	36.0	42.6	36.3	146.66477	5-6
7	-11.150	-15.286	1578.03847	-64.8	10.3	-82.7	26.0	25.74281	0.782	-88.3	72.7	36.0	38.6	36.2	111.56148	6-7
8	-9.741	-17.619	1531.33655	-66.8	8.7	-81.7	25.1	24.90738	0.836	-86.2	70.3	37.9	33.6	32.1	81.55255	7-8
9	-9.560	-13.430	1603.88606	-70.5	9.9	-82.2	22.4	26.13254	0.756	-85.8	74.5	34.2	41.0	40.0	125.21743	8-9
10	-9.366	-8.437	1707.18330	-73.3	11.1	-82.8	19.9	27.73499	0.653	-85.4	79.4	30.5	49.4	48.8	149.29343	9-10
11	-12.913	-7.247	1751.76964	-66.3	14.2	-86.1	24.7	28.54201	0.610	-91.0	80.7	30.4	52.5	49.8	113.08622	10-11
12	-17.172	-5.376	1827.91930	-59.5	18.3	-90.9	29.8	29.71855	0.543	-97.2	82.7	30.6	57.3	50.9	140.15517	11-12
13	-16.837	-11.318	1699.27731	-55.3	15.8	-87.3	32.4	27.67305	0.660	-96.5	77.1	34.3	48.8	40.7	172.41804	12-13
14	-16.638	-16.085	1612.46466	-50.0	13.4	-85.1	35.2	26.18537	0.748	-95.9	72.5	38.0	41.8	31.9	138.38649	13-14
15	-12.911	-16.992	1561.86242	-58.0	10.7	-83.1	30.0	25.44806	0.801	-90.8	71.2	37.8	36.9	32.3	115.96528	14-15
16	-9.741	-17.619	1531.33655	-66.8	8.7	-81.7	25.1	24.90738	0.836	-86.2	70.3	37.9	33.6	32.1	97.81205	15-16

JULY 31, 1964 13 HR 15 MIN 3 SEC 754 MS TAB NO 75 ATLAS PHOTO NO 75 POD SEQUENCE NO 153

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				645.046		1382.23776	-4.873	-32.636	3117.693	2.082	-72.403	116.627				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.884	-12.621	1628.19455	-62.7	12.4	-84.3	27.3	26.58956	0.718	-90.9	75.5	34.1	44.1	40.5	0.	1-2
3	-11.156	-15.304	1567.13161	-64.8	10.3	-82.7	26.1	25.56488	0.783	-88.3	72.7	36.0	38.6	36.2	95.17734	2-3
4	-11.052	-10.684	1655.50899	-68.4	11.8	-83.6	23.5	26.99846	0.691	-88.1	77.2	32.2	46.3	44.6	137.36006	3-4
5	-14.823	-9.451	1707.38091	-61.0	15.0	-86.8	28.5	27.85237	0.641	-93.8	78.7	32.3	50.2	45.3	119.89147	4-5
6	-14.710	-14.419	1610.08035	-56.6	13.0	-84.8	31.2	26.25751	0.737	-93.5	73.9	36.0	42.6	36.3	145.55188	5-6
7	-11.156	-15.304	1567.13161	-64.8	10.3	-82.7	26.1	25.56488	0.783	-88.3	72.7	36.0	38.6	36.2	110.78347	6-7
8	-9.756	-17.621	1520.74518	-66.8	8.7	-81.7	25.1	24.73511	0.836	-86.2	70.3	37.9	33.6	32.1	80.99281	7-8
9	-9.376	-13.461	1692.76089	-70.5	9.9	-82.2	22.5	25.95130	0.756	-85.8	74.4	34.2	41.0	40.0	124.33159	8-9
10	-9.284	-8.506	1695.17178	-73.2	11.1	-82.7	20.0	27.53991	0.654	-85.4	79.3	30.5	49.3	48.7	148.13577	9-10
11	-12.934	-7.327	1739.40596	-66.3	14.1	-86.1	24.7	28.34057	0.611	-91.0	80.6	30.3	52.4	49.7	112.27400	10-11
12	-17.134	-5.476	1814.80727	-59.5	18.2	-90.8	29.8	29.50539	0.544	-97.2	82.7	30.6	57.2	50.8	139.04510	11-12
13	-16.802	-11.367	1687.41129	-55.3	15.8	-87.3	32.4	27.47984	0.661	-96.5	77.0	34.3	48.8	40.7	170.94611	12-13
14	-16.605	-16.097	1601.28871	-50.0	13.4	-85.1	35.2	26.00392	0.749	-95.9	72.5	38.0	41.8	31.9	137.36916	13-14
15	-12.905	-16.998	1551.05817	-58.0	10.7	-83.1	30.0	25.27234	0.801	-90.8	71.2	37.8	36.9	32.3	115.14456	14-15
16	-9.756	-17.621	1520.74518	-66.8	8.7	-81.7	25.1	24.73511	0.836	-86.2	70.3	37.9	33.6	32.1	97.14151	15-16

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JULY 31, 1964 13 HR 15 MIN 8 SEC 874 MS TAB NO 76 ATLAS PHOTO NO 76 POD SEQUENCE NO 155

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ	
								639.926	1372.07339	-4.900	-32.583	3107.529	2.084	-72.364	116.620	
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.877	-12.658	1616.80862	-62.7	12.4	-84.3	27.3	26.40362	0.718	-90.9	75.4	34.1	44.1	40.5	0.	1-2
3	-11.161	-15.321	1556.20729	-64.8	10.3	-82.7	26.1	25.38668	0.783	-88.3	72.7	36.0	38.6	36.2	94.49005	2-3
4	-11.057	-10.736	1643.87238	-68.4	11.8	-83.6	23.5	26.80870	0.692	-88.1	77.2	32.2	46.3	44.6	136.33779	3-4
5	-14.802	-9.514	1695.32146	-61.0	15.0	-86.8	28.5	27.65565	0.641	-93.8	78.6	32.3	50.1	45.2	119.02159	4-5
6	-14.691	-14.444	1598.84027	-56.6	12.9	-84.8	31.2	26.07422	0.737	-93.5	73.9	36.0	42.5	36.3	144.43815	5-6
7	-11.161	-15.321	1556.20729	-64.8	10.3	-82.7	26.1	25.38668	0.783	-88.3	72.7	36.0	38.6	36.2	110.00415	6-7
8	-9.771	-17.623	1510.13737	-66.7	8.7	-81.7	25.1	24.56258	0.836	-86.2	70.3	37.9	33.6	32.1	80.43192	7-8
9	-9.593	-13.492	1581.61832	-70.5	9.9	-82.2	22.5	25.76277	0.756	-85.8	74.4	34.2	41.0	40.0	123.44432	8-9
10	-9.401	-8.576	1683.14320	-73.2	11.1	-82.7	20.0	27.34456	0.655	-85.4	79.2	30.5	49.3	48.6	146.97763	9-10
11	-12.898	-7.407	1727.02490	-66.3	14.1	-86.0	24.7	28.13885	0.612	-91.0	80.6	30.3	52.3	49.6	111.46081	10-11
12	-17.095	-5.576	1801.88022	-59.5	18.2	-90.8	29.8	29.29199	0.546	-97.2	82.6	30.6	57.1	50.7	137.93575	11-12
13	-16.767	-11.415	1675.52687	-55.3	15.7	-87.3	32.4	27.28634	0.661	-96.5	77.0	34.3	48.7	40.6	169.47629	12-13
14	-16.572	-16.110	1590.09503	-50.0	13.4	-85.1	35.2	25.82218	0.749	-95.9	72.5	38.0	41.8	31.9	136.35055	13-14
15	-12.898	-17.003	1540.25661	-58.0	10.7	-83.1	30.0	25.09635	0.801	-90.8	71.2	37.8	36.9	32.3	114.32269	14-15
16	-9.771	-17.623	1510.13737	-66.7	8.7	-81.7	25.1	24.56258	0.836	-86.2	70.3	37.9	33.6	32.1	96.46984	15-16

JULY 31, 1964 13 HR 15 MIN 13 SEC 993 MS TAB NO 77 ATLAS PHOTO NO 77 POD SEQUENCE NO 157

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ	
								634.806	1361.89908	-4.927	-32.529	3097.354	2.087	-72.325	116.613	
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.870	-12.696	1605.40402	-62.7	12.4	-84.3	27.3	26.21738	0.719	-90.9	75.4	34.1	44.1	40.5	0.	1-2
3	-11.166	-15.339	1545.26514	-64.7	10.3	-82.7	26.1	25.20818	0.783	-88.3	72.7	36.0	38.6	36.2	93.80151	2-3
4	-11.063	-10.788	1632.21742	-68.4	11.8	-83.6	23.5	26.61864	0.692	-88.1	77.1	32.2	46.2	44.5	135.31426	3-4
5	-14.781	-9.577	1683.24330	-61.0	14.9	-86.7	28.5	27.65862	0.642	-93.8	78.6	32.3	50.1	45.1	118.15048	4-5
6	-14.671	-14.468	1587.58162	-56.6	12.9	-84.8	31.1	25.89062	0.738	-93.5	73.8	36.0	42.5	36.3	143.32349	5-6
7	-11.166	-15.339	1545.26514	-64.7	10.3	-82.7	26.1	25.20818	0.783	-88.3	72.7	36.0	38.6	36.2	109.22331	6-7
8	-9.786	-17.625	1499.51288	-66.7	8.7	-81.7	25.2	24.38978	0.836	-86.2	70.3	37.9	33.6	32.1	79.86939	7-8
9	-9.609	-13.524	1570.45790	-70.4	9.9	-82.1	22.6	25.58795	0.756	-85.8	74.4	34.2	41.0	39.9	122.55544	8-9
10	-9.419	-8.646	1671.09732	-73.1	11.1	-82.7	20.1	27.14892	0.656	-85.4	79.2	30.5	49.2	48.6	145.81918	9-10
11	-12.890	-7.487	1714.62613	-66.3	14.1	-86.0	24.7	27.93684	0.613	-91.0	80.5	30.3	52.3	49.6	110.64645	10-11
12	-17.055	-5.677	1788.53766	-59.5	18.1	-90.7	29.7	29.07833	0.547	-97.2	82.5	30.6	57.0	50.6	136.82679	11-12
13	-16.732	-11.464	1663.62367	-55.3	15.7	-87.3	32.4	27.09253	0.662	-96.5	76.9	34.3	48.7	40.6	168.00849	12-13
14	-16.539	-16.123	1578.88316	-50.1	13.4	-85.1	35.1	25.64015	0.749	-95.9	72.4	38.0	41.7	31.9	135.33068	13-14
15	-12.891	-17.009	1529.43739	-58.0	10.7	-83.1	30.0	24.92006	0.801	-90.8	71.2	37.8	36.9	32.3	113.49960	14-15
16	-9.786	-17.625	1499.51288	-66.7	8.7	-81.7	25.2	24.38978	0.836	-86.2	70.3	37.9	33.6	32.1	95.79673	15-16

JULY 31, 1964 13 HR 15 MIN 19 SEC 113 MS TAB NO 78 ATLAS PHOTO NO 78 POD SEQUENCE NO 159

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				629.686		1351.71481		-4.953		-32.475		3087.170		2.089		-72.285		116.606	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-12.863	-12.733	1593.97559	-62.7	12.4	-84.3	27.3	26.03075	0.719	-90.9	75.4	34.1	44.0	40.4	0.	1-2			
3	-11.171	-15.358	1534.30119	-64.7	10.3	-82.7	26.1	25.02932	0.783	-88.3	72.7	36.0	38.6	36.1	93.11093	2-3			
4	-11.064	-10.840	1620.53911	-68.3	11.8	-83.6	23.6	26.42820	0.692	-88.1	77.1	32.2	46.2	44.5	134.28871	3-4			
5	-14.760	-9.641	1671.13972	-61.0	14.9	-86.7	28.5	27.26118	0.643	-93.8	78.5	32.3	50.0	45.1	117.27707	4-5			
6	-14.651	-14.493	1576.29901	-56.6	12.9	-84.8	31.1	25.70663	0.738	-93.5	73.8	36.0	42.5	36.2	142.20680	5-6			
7	-11.171	-15.358	1534.30119	-64.7	10.3	-82.7	26.1	25.02932	0.783	-88.3	72.7	36.0	38.6	36.1	108.44048	6-7			
8	-9.801	-17.627	1488.86848	-66.7	8.7	-81.7	25.2	24.21665	0.836	-86.2	70.3	37.9	33.6	32.1	79.30583	7-8			
9	-9.624	-13.556	1559.27592	-70.4	10.0	-82.1	22.6	25.40578	0.757	-85.8	74.3	34.2	41.0	39.9	121.66461	8-9			
10	-9.435	-8.717	1659.02908	-73.1	11.1	-82.7	20.1	26.95292	0.656	-85.4	79.1	30.4	49.1	48.5	144.65924	9-10			
11	-12.882	-7.567	1702.20291	-66.2	14.1	-86.0	24.8	27.73443	0.614	-91.0	80.4	30.3	52.2	49.5	109.83004	10-11			
12	-17.016	-5.778	1775.37007	-59.5	18.1	-90.7	29.7	28.86427	0.549	-97.2	82.4	30.6	56.9	50.5	135.71654	11-12			
13	-16.697	-11.514	1651.69463	-55.3	15.7	-87.3	32.4	26.89829	0.663	-96.5	76.9	34.3	48.6	40.5	166.54046	12-13			
14	-16.505	-16.137	1567.64743	-50.1	13.3	-85.1	35.1	25.45773	0.749	-95.9	72.4	38.0	41.7	31.9	134.30838	13-14			
15	-12.883	-17.015	1518.59633	-58.0	10.7	-83.1	30.0	24.74343	0.801	-90.8	71.2	37.8	36.9	32.3	112.67427	14-15			
16	-9.801	-17.627	1488.86848	-66.7	8.7	-81.7	25.2	24.21665	0.836	-86.2	70.3	37.9	33.6	32.1	95.12195	15-16			

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JULY 31, 1964 13 HR 15 MIN 24 SEC 233 MS TAB NO 79 ATLAS PHOTO NO 79 POD SEQUENCE NO 161

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				624.566		1341.52066	-4.981	-32.421	3076.976	2.092	-72.245	116.599				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.855	-12.772	1582.52852	-62.7	12.4	-84.3	27.3	25.84381	0.719	-90.9	75.3	34.1	44.0	40.4	0.	1-2
3	-11.176	-15.376	1523.31941	-64.7	10.3	-82.7	26.1	24.85018	0.783	-88.3	72.7	35.9	38.5	36.1	92.41919	2-3
4	-11.074	-10.893	1608.84250	-68.3	11.8	-83.5	23.6	26.23747	0.693	-88.1	77.0	32.2	46.2	44.4	133.26192	3-4
5	-14.738	-9.704	1659.01755	-61.0	14.9	-86.7	28.5	27.06343	0.644	-93.8	78.4	32.3	50.0	45.0	116.40258	4-5
6	-14.630	-14.519	1564.99789	-56.6	12.9	-84.8	31.1	25.52234	0.738	-93.5	73.8	36.0	42.5	36.2	141.08916	5-6
7	-11.176	-15.376	1523.31941	-64.7	10.3	-82.7	26.1	24.85018	0.783	-88.3	72.7	35.9	38.5	36.1	107.65632	6-7
8	-9.815	-17.629	1478.20731	-66.6	8.7	-81.7	25.2	24.04325	0.836	-86.2	70.3	37.9	33.7	32.1	78.74059	7-8
9	-9.640	-13.588	1548.07614	-70.3	10.0	-82.1	22.6	25.22331	0.757	-85.8	74.3	34.2	40.9	39.9	120.77220	8-9
10	-9.452	-8.787	1646.94357	-73.1	11.1	-82.7	20.2	26.75663	0.657	-85.4	79.0	30.4	49.1	48.4	143.49895	9-10
11	-12.873	-7.648	1689.76207	-66.2	14.1	-85.9	24.8	27.53174	0.615	-91.0	80.3	30.3	52.1	49.4	109.01256	10-11
12	-16.976	-5.879	1762.18718	-59.5	18.1	-90.6	29.7	28.64996	0.550	-97.2	82.3	30.6	56.8	50.4	134.60660	11-12
13	-16.661	-11.563	1639.74693	-55.4	15.6	-87.2	32.3	26.70376	0.663	-96.5	76.8	34.3	48.6	40.5	165.07457	12-13
14	-16.471	-16.150	1556.99363	-50.1	13.3	-85.2	35.1	25.27502	0.750	-95.9	72.4	38.0	41.7	31.9	133.28476	13-14
15	-12.876	-17.022	1507.73759	-58.0	10.7	-83.1	30.0	24.56650	0.801	-90.8	71.2	37.8	36.9	32.3	111.84766	14-15
16	-9.815	-17.629	1478.20731	-66.6	8.7	-81.7	25.2	24.04325	0.836	-86.2	70.3	37.9	33.7	32.1	94.44580	15-16

JULY 31, 1964 13 HR 15 MIN 29 SEC 353 MS TAB NO 80 ATLAS PHOTO NO 80 POD SEQUENCE NO 163

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				619.446		1331.31647	-5.008	-32.366	3066.772	2.094	-72.205	116.592				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.847	-12.811	1571.05856	-62.7	12.4	-84.3	27.3	25.65649	0.720	-90.9	75.3	34.1	44.0	40.3	0.	1-2
3	-11.180	-15.395	1512.31647	-64.7	10.4	-82.7	26.2	24.67069	0.783	-88.3	72.6	35.9	38.5	36.1	91.72561	2-3
4	-11.079	-10.947	1597.12343	-68.3	11.8	-83.5	23.6	26.04636	0.694	-88.1	77.0	32.2	46.1	44.4	132.23339	3-4
5	-14.716	-9.769	1646.87131	-61.0	14.9	-86.7	28.5	26.86529	0.645	-93.8	78.4	32.3	49.9	44.9	115.52591	4-5
6	-14.609	-14.544	1553.67386	-56.6	12.9	-84.8	31.1	25.33768	0.739	-93.5	73.8	36.0	42.4	36.2	139.96973	5-6
7	-11.180	-15.395	1512.31647	-64.7	10.4	-82.7	26.2	24.67069	0.783	-88.3	72.6	35.9	38.5	36.1	106.87006	6-7
8	-9.830	-17.632	1467.52673	-66.6	8.8	-81.7	25.2	23.86954	0.836	-86.2	70.3	37.9	33.7	32.1	78.17365	7-8
9	-9.655	-13.620	1536.85530	-70.3	10.0	-82.1	22.7	25.04051	0.757	-85.8	74.3	34.2	40.9	39.9	119.87780	8-9
10	-12.865	-7.730	1677.29805	-66.2	14.1	-85.9	24.8	26.56000	0.658	-85.4	79.0	30.4	49.0	48.4	142.33736	9-10
11	-16.935	-5.981	1488.98143	-59.5	18.0	-90.5	29.7	28.43527	0.552	-97.2	80.2	30.3	52.1	49.3	108.19319	10-11
12	-16.625	-11.614	1627.77501	-55.4	15.6	-87.2	32.3	26.50883	0.664	-96.5	76.8	34.3	48.6	40.4	163.60892	11-12
13	-16.437	-16.164	1545.11722	-50.2	13.3	-85.2	35.0	25.09194	0.750	-95.9	72.4	38.0	41.7	31.9	132.25907	12-13
14	-12.868	-17.029	1496.65777	-58.0	10.7	-83.1	30.0	24.38923	0.801	-90.8	71.2	37.8	36.9	32.3	111.01924	13-14
15	-9.830	-17.632	1467.52673	-66.6	8.8	-81.7	25.2	23.86954	0.836	-86.2	70.3	37.9	33.7	32.1	93.76802	14-15

JULY 31, 1964 13 HR 15 MIN 34 SEC 473 MS TAB NO 81 ATLAS PHOTO NO 81 POD SEQUENCE NO 165

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				614.326		1321.10220	-5.035	-32.311	3056.557	2.097	-72.164	116.585				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.838	-12.851	1559.53650	-62.7	12.4	-84.3	27.3	25.46833	0.720	-90.9	75.3	34.1	43.9	40.3	0.	1-2
3	-11.183	-15.416	1501.26993	-64.7	10.4	-82.7	26.2	24.49048	0.783	-88.3	72.6	35.9	38.5	36.1	91.02490	2-3
4	-11.082	-11.002	1585.35303	-68.3	11.8	-83.5	23.7	25.85442	0.694	-88.1	76.9	32.2	46.1	44.3	131.19749	3-4
5	-14.692	-9.835	1636.66235	-61.0	14.8	-86.6	28.5	26.66613	0.646	-93.8	78.3	32.3	49.8	44.9	114.64121	4-5
6	-14.588	-14.572	1542.29697	-56.6	12.9	-84.8	31.1	25.15215	0.739	-93.5	73.7	36.0	42.4	36.2	138.84099	5-6
7	-11.183	-15.416	1501.26993	-64.7	10.4	-82.7	26.2	24.49048	0.783	-88.3	72.6	35.9	38.5	36.1	106.07739	6-7
8	-9.843	-17.636	1456.80913	-66.6	8.8	-81.7	25.3	23.69522	0.836	-86.2	70.3	37.9	33.7	32.1	77.60160	7-8
9	-9.670	-13.654	1525.59129	-70.3	10.0	-82.1	22.7	24.85700	0.757	-85.8	74.2	34.2	40.9	39.8	118.97772	8-9
10	-12.855	-7.813	1664.77213	-66.2	14.1	-85.9	24.8	27.12458	0.617	-91.0	80.2	30.3	52.0	49.2	107.36649	9-10
11	-16.894	-6.085	1735.69919	-59.5	18.0	-90.5	29.7	28.21935	0.553	-97.2	82.1	30.6	56.6	50.2	132.37389	10-11
12	-16.587	-11.666	1615.73929	-55.4	15.6	-87.2	32.3	26.31286	0.665	-96.5	76.7	34.3	48.4	40.4	162.13120	11-12
13	-16.401	-16.180	1532.78683	-50.2	13.3	-85.2	35.0	24.90799	0.750	-95.9	72.4	38.0	41.6	31.9	131.22420	12-13
14	-12.859	-17.037	1485.93350	-58.0	10.7	-83.1	30.0	24.21124	0.801	-90.8	71.2	37.8	36.9	32.3	110.18368	13-14
15	-9.843	-17.636	1456.80913	-66.6	8.8	-81.7	25.3	23.69522	0.836	-86.2	70.3	37.9	33.7	32.1	93.08574	14-15

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JULY 31, 1964 13 HR 15 MIN 39 SEC 593 MS

TAB NO 82 ATLAS PHOTO NO 82 POD SEQUENCE NO 167

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
				609.206		1310.87762	-5.063	-32.255	3046.333	2.099	-72.124	116.578
PHOTO DATA												
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA SCALE PT-PT
2	-12.829	-12.892	1547.99579	-62.6	12.4	-84.2	27.4	25.27986	0.721	-90.9	75.2 34.1 43.9	40.3 0. 1-2
3	-11.187	-15.436	1490.20534	-64.6	10.4	-82.7	26.2	24.30999	0.783	-88.3	72.6 35.9 38.5	36.1 90.32314 2-3
4	-11.086	-11.058	1573.56430	-68.2	11.8	-83.5	23.7	25.66218	0.695	-88.1	76.9 32.2 46.0	44.3 130.16056 3-4
5	-14.669	-9.902	1622.43517	-61.0	14.8	-86.6	28.5	26.46667	0.646	-93.8	78.2 32.3 49.8	44.8 113.75550 4-5
6	-14.566	-14.599	1530.90152	-56.6	12.9	-84.8	31.1	24.96633	0.739	-93.5	73.7 36.0 42.4	36.2 137.71168 5-6
7	-11.187	-15.436	1490.20534	-64.6	10.4	-82.7	26.2	24.30999	0.783	-88.3	72.6 35.9 38.5	36.1 105.28353 6-7
8	-9.856	-17.640	1446.07437	-66.6	8.8	-81.6	25.3	23.52062	0.836	-86.2	70.3 37.9 33.7	32.1 77.02842 7-8
9	-9.684	-13.689	1514.30923	-70.2	10.0	-82.1	22.8	24.67370	0.758	-85.8	74.2 34.2 40.9	39.8 118.07624 8-9
10	-9.500	-9.005	1610.50328	-72.9	11.2	-82.6	20.3	26.16481	0.660	-85.4	78.8 30.4 48.9	48.2 139.99934 9-10
11	-12.845	-7.897	1652.22697	-66.2	14.0	-85.8	24.8	26.92022	0.618	-91.0	80.1 30.3 51.9	49.2 106.53885 10-11
12	-16.852	-6.189	1722.40254	-59.5	17.9	-90.4	29.7	28.00318	0.555	-97.2	82.0 30.6 56.5	50.0 131.25270 11-12
13	-16.549	-11.718	1603.68530	-55.4	15.5	-87.2	32.3	26.11659	0.665	-96.5	76.7 34.3 48.4	40.3 160.65595 12-13
14	-16.366	-16.196	1522.43837	-50.2	13.2	-85.2	34.9	24.72375	0.751	-95.9	72.4 38.0 41.6	31.9 130.18841 13-14
15	-12.850	-17.045	1474.99135	-58.0	10.7	-83.1	30.0	24.03295	0.801	-90.8	71.2 37.8 36.9	32.3 109.34716 14-15
16	-9.856	-17.640	1446.07437	-66.6	8.8	-81.6	25.3	23.52062	0.836	-86.2	70.3 37.9 33.7	32.1 92.40207 15-16

JULY 31, 1964 13 HR 15 MIN 44 SEC 713 MS

TAB NO 83 ATLAS PHOTO NO 83 POD SEQUENCE NO 169

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
				604.087			1300.64297	-5.091	-32.199	3036.098	2.102	-72.083	116.570			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.820	-12.932	1536.43839	-62.6	12.4	-84.2	27.4	25.09112	0.721	-90.9	75.2	34.0	43.9	40.2	0.	1-2
3	-11.190	-15.457	1479.12448	-64.6	10.4	-82.7	26.2	24.12922	0.784	-88.3	72.6	35.9	38.5	36.1	89.62065	2-3
4	-11.090	-11.113	1561.76038	-68.2	11.8	-83.5	23.7	25.46970	0.696	-88.1	76.8	32.2	46.0	44.2	129.12360	3-4
5	-14.645	-9.969	1610.19191	-61.0	14.8	-86.6	28.5	26.26695	0.647	-93.8	78.2	32.3	49.7	44.7	112.86856	4-5
6	-14.543	-14.627	1519.48846	-56.7	12.8	-84.8	31.1	24.78021	0.740	-93.5	73.7	36.0	42.4	36.1	136.58270	5-6
7	-11.190	-15.457	1479.12448	-64.6	10.4	-82.7	26.2	24.12922	0.784	-88.3	72.6	35.9	38.5	36.1	104.48811	6-7
8	-9.869	-17.645	1435.32419	-66.5	8.8	-81.6	25.3	23.34577	0.835	-86.2	70.3	37.9	33.7	32.1	76.45410	7-8
9	-9.698	-13.723	1503.01190	-70.2	10.0	-82.1	22.8	24.48915	0.758	-85.8	74.2	34.1	40.8	39.8	117.17398	8-9
10	-9.515	-9.078	1598.31517	-72.9	11.2	-82.6	20.4	25.96667	0.661	-85.4	78.7	30.4	48.8	48.2	138.83133	9-10
11	-12.835	-7.981	1639.67207	-66.2	14.0	-85.8	24.9	26.71564	0.619	-91.0	80.0	30.3	51.8	49.1	105.71002	10-11
12	-16.810	-6.294	1709.09396	-59.5	17.8	-90.3	29.7	27.78682	0.556	-97.2	81.9	30.6	56.4	49.9	130.13205	11-12
13	-16.511	-11.771	1591.61386	-55.4	15.5	-87.2	32.3	25.92004	0.666	-96.5	76.6	34.3	48.3	40.3	159.18447	12-13
14	-16.329	-16.212	1511.07176	-50.3	13.2	-85.2	34.9	24.53921	0.751	-95.9	72.3	38.0	41.6	31.9	129.15218	13-14
15	-12.841	-17.054	1464.03230	-58.0	10.7	-83.1	29.9	23.85439	0.801	-90.8	71.2	37.8	36.9	32.3	108.50880	14-15
16	-9.869	-17.645	1435.32419	-66.5	8.8	-81.6	25.3	23.34577	0.835	-86.2	70.3	37.9	33.7	32.1	91.71709	15-16

JULY 31, 1964 13 HR 15 MIN 49 SEC 833 MS

TAB NO 84 ATLAS PHOTO NO 84 POD SEQUENCE NO 171

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
				598.967		1290.39816	-5.119	-32.143	3025.853	2.105	-72.042	116.563
PHOTO DATA												
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE PT-PT
2	-12.810	-12.973	1524.86955	-62.6	12.3	-84.2	27.4	24.90219	0.722	-90.9	75.1 34.0 43.8 40.2 0.	1-2
3	-11.192	-15.477	1468.03250	-64.6	10.4	-82.6	26.2	23.94828	0.784	-88.3	72.6 35.9 38.5 36.0	88.91755 2-3
4	-11.093	-11.168	1549.45045	-68.2	11.8	-83.5	23.7	25.27711	0.696	-88.1	76.8 32.2 45.9 44.2	128.08954 3-4
5	-14.621	-10.035	1597.73822	-61.0	14.8	-86.6	28.5	26.06706	0.648	-93.8	78.1 32.3 49.7 44.7	111.97922 4-5
6	-14.520	-14.655	1508.05952	-56.7	12.8	-84.8	31.0	24.59384	0.740	-93.5	73.7 36.0 42.3 36.1	135.45678 5-6
7	-11.192	-15.477	1468.03250	-64.6	10.4	-82.6	26.2	23.94828	0.784	-88.3	72.6 35.9 38.5 36.0	103.69008 6-7
8	-9.881	-17.644	1424.56342	-66.5	8.8	-81.6	25.3	23.17075	0.835	-86.2	70.3 37.9 33.7 32.1	75.87914 7-8
9	-9.711	-13.757	1491.70776	-70.2	10.0	-82.1	22.8	24.30458	0.758	-85.8	74.1 34.1 40.8 39.7	116.27353 8-9
10	-9.530	-9.150	1586.12779	-72.9	11.2	-82.6	20.4	25.76894	0.661	-85.4	78.7 30.4 48.8 48.1	137.66842 9-10
11	-12.824	-8.064	1627.11174	-66.1	14.0	-85.8	24.9	26.51100	0.620	-91.0	79.9 30.3 51.7 49.0	104.87961 10-11
12	-16.767	-6.398	1695.77959	-59.5	17.8	-90.3	29.7	27.57037	0.558	-97.2	81.8 30.6 56.3 49.8	129.01013 11-12
13	-16.472	-11.823	1579.52647	-55.4	15.4	-87.2	32.2	25.72322	0.667	-96.5	76.5 34.3 48.3 40.2	157.72032 12-13
14	-16.292	-16.228	1499.68538	-50.3	13.2	-85.2	34.9	24.35425	0.751	-95.9	72.3 38.0 41.6 31.8	128.11751 13-14
15	-12.831	-17.062	1453.05826	-58.1	10.7	-83.1	29.9	23.67559	0.801	-90.8	71.2 37.8 36.9 32.3	107.66756 14-15
16	-9.881	-17.644	1424.56342	-66.5	8.8	-81.6	25.3	23.17075	0.835	-86.2	70.3 37.9 33.7 32.1	91.02994 15-16

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 15 MIN 54 SEC 953 MS

TAB NO 85

ATLAS PHOTO NO 85

POD SEQUENCE NO 173

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				593.847	1280.14279	-5.147	-32.086	3015.598	2.107	-72.000	116.556					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.799	-13.014	1513.28171	-62.6	12.3	-84.2	27.4	24.71296	0.722	-90.9	75.1	34.0	43.8	40.2	0.	1-2
3	-11.194	-15.498	1456.92209	-64.6	10.4	-82.6	26.2	23.76703	0.784	-88.3	72.5	35.9	38.5	36.0	88.21341	2-3
4	-11.095	-11.224	1538.12177	-68.2	11.8	-83.4	23.8	25.08422	0.697	-88.1	76.7	32.2	45.9	44.1	127.05442	3-4
5	-14.596	-10.102	1585.66602	-61.0	14.7	-86.5	28.5	25.86687	0.649	-93.8	78.1	32.2	49.6	44.6	111.08896	4-5
6	-14.496	-14.682	1496.61183	-56.7	12.8	-84.8	31.0	24.40716	0.740	-93.5	73.6	36.0	42.3	36.1	134.33022	5-6
7	-11.194	-15.498	1456.92209	-64.6	10.4	-82.6	26.2	23.76703	0.784	-88.3	72.5	35.9	38.5	36.0	102.89089	6-7
8	-9.893	-17.653	1413.78508	-66.5	8.8	-81.6	25.3	22.99544	0.835	-86.2	70.3	37.9	33.7	32.1	75.30306	7-8
9	-9.725	-13.791	1480.38515	-70.1	10.0	-82.0	22.9	24.12052	0.758	-85.8	74.1	34.1	40.8	39.7	115.37157	8-9
10	-9.544	-9.223	1573.92255	-72.8	11.2	-82.5	20.5	25.97071	0.662	-85.4	78.6	30.4	48.7	48.0	136.50525	9-10
11	-12.813	-8.148	1614.53374	-66.1	14.0	-85.7	24.9	26.30607	0.621	-91.0	79.8	30.3	51.7	48.9	104.04841	10-11
12	-16.724	-6.502	1682.45061	-59.5	17.7	-90.2	29.7	27.35368	0.559	-97.2	81.7	30.6	56.2	49.7	127.88915	11-12
13	-16.433	-11.876	1567.42059	-55.4	15.4	-87.1	32.2	25.52611	0.668	-96.5	76.5	34.3	48.2	40.2	156.25867	12-13
14	-16.255	-16.244	1488.28082	-50.3	13.2	-85.2	34.8	24.16920	0.752	-95.9	72.3	38.0	41.5	31.8	127.08172	13-14
15	-12.820	-17.071	1442.06609	-58.1	10.7	-83.1	29.9	23.49649	0.801	-90.8	71.1	37.8	36.9	32.3	106.82522	14-15
16	-9.893	-17.653	1413.78508	-66.5	8.8	-81.6	25.3	22.99544	0.835	-86.2	70.3	37.9	33.7	32.1	90.34170	15-16

JULY 31, 1964 13 HR 16 MIN 0 SEC 73 MS

TAB NO 86

ATLAS PHOTO NO 86

POD SEQUENCE NO 175

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				588.727	1269.87741	-5.176	-32.029	3005.333	2.110	-71.959	116.548					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.789	-13.055	1501.66327	-62.6	12.3	-84.2	27.4	24.52322	0.722	-90.9	75.1	34.0	43.7	40.1	0.	1-2
3	-11.196	-15.519	1445.78398	-64.6	10.4	-82.6	26.2	23.58534	0.784	-88.3	72.5	35.9	38.5	36.0	87.50638	2-3
4	-11.097	-11.280	1526.26152	-68.1	11.7	-83.4	23.8	24.89082	0.697	-88.1	76.7	32.2	45.8	44.1	126.01537	3-4
5	-14.571	-10.169	1573.36040	-61.0	14.7	-86.5	28.5	25.66613	0.650	-93.8	78.0	32.2	49.5	44.5	110.19617	4-5
6	-14.473	-14.711	1485.13466	-56.7	12.8	-84.8	31.0	24.22000	0.741	-93.5	73.6	36.0	42.3	36.1	133.19957	5-6
7	-11.196	-15.519	1445.78398	-64.6	10.4	-82.6	26.2	23.58534	0.784	-88.3	72.5	35.9	38.5	36.0	102.08922	6-7
8	-9.904	-17.658	1402.98177	-66.5	8.8	-81.6	25.4	22.81973	0.835	-86.2	70.3	37.9	33.7	32.1	74.72446	7-8
9	-9.738	-13.826	1469.03378	-70.1	10.0	-82.0	22.9	23.93559	0.759	-85.8	74.1	34.1	40.8	39.7	114.46602	8-9
10	-9.558	-9.297	1561.68506	-72.8	11.2	-82.5	20.5	25.37197	0.663	-85.4	78.5	30.4	48.6	48.0	135.33834	9-10
11	-12.802	-8.232	1601.92157	-66.1	14.0	-85.7	24.9	26.10059	0.623	-91.0	79.7	30.3	51.6	48.8	103.21445	10-11
12	-16.681	-6.606	1669.08690	-59.5	17.7	-90.1	29.7	27.13642	0.561	-97.2	81.6	30.6	56.1	49.6	126.76640	11-12
13	-16.394	-11.929	1555.28242	-55.5	15.4	-87.1	32.2	25.32847	0.668	-96.5	76.4	34.3	48.2	40.1	154.79408	12-13
14	-16.217	-16.261	1476.84804	-50.4	13.1	-85.2	34.8	23.98359	0.752	-95.9	72.3	38.0	41.5	31.8	126.04194	13-14
15	-12.810	-17.080	1431.04721	-58.1	10.7	-83.1	29.9	23.31696	0.801	-90.8	71.1	37.8	36.9	32.2	105.98070	14-15
16	-9.904	-17.658	1402.98177	-66.5	8.8	-81.6	25.4	22.81973	0.835	-86.2	70.3	37.9	33.7	32.1	89.65133	15-16

JULY 31, 1964 13 HR 16 MIN 5 SEC 192 MS

TAB NO 87

ATLAS PHOTO NO 87

POD SEQUENCE NO 177

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				583.607	1259.60132	-5.204	-31.972	2995.057	2.112	-71.917	116.541					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.778	-13.099	1489.98906	-62.6	12.3	-84.2	27.4	24.33257	0.723	-90.9	75.0	34.0	43.7	40.1	0.	1-2
3	-11.197	-15.542	1434.59787	-64.6	10.4	-82.6	26.3	23.40286	0.784	-88.3	72.5	35.9	38.4	36.0	86.79262	2-3
4	-11.100	-11.338	1514.34218	-68.1	11.7	-83.4	23.8	24.69645	0.698	-88.1	76.6	32.2	45.8	44.0	124.96660	3-4
5	-14.545	-10.240	1560.98940	-61.0	14.7	-86.5	28.5	25.46433	0.651	-93.8	77.9	32.2	49.5	44.5	109.29703	4-5
6	-14.448	-14.742	1473.60464	-56.7	12.8	-84.7	31.0	24.03198	0.741	-93.5	73.6	36.0	42.2	36.0	132.05786	5-6
7	-11.197	-15.542	1434.59787	-64.6	10.4	-82.6	26.3	23.40286	0.784	-88.3	72.5	35.9	38.4	36.0	101.28276	6-7
8	-9.916	-17.664	1392.13670	-66.5	8.8	-81.6	25.4	22.64333	0.835	-86.2	70.3	37.9	33.7	32.1	74.14077	7-8
9	-9.750	-13.863	1457.63144	-70.1	10.0	-82.0	22.9	23.74983	0.759	-85.8	74.0	34.1	40.7	39.7	113.55272	8-9
10	-9.573	-9.374	1549.38455	-72.8	11.2	-82.5	20.5	25.17220	0.664	-85.4	78.5	30.4	48.6	47.9	134.16060	9-10
11	-12.790	-8.319	1589.24007	-66.1	13.9	-85.7	24.9	25.89397	0.624	-91.0	79.7	30.3	51.5	48.7	102.37464	10-11
12	-16.637	-6.714	1655.64603	-59.5	17.6	-90.1	29.7	26.91791	0.562	-97.2	81.4	30.6	56.0	49.5	125.63559	11-12
13	-16.354	-11.985	1543.08240	-55.5	15.3	-87.1	32.2	25.12982	0.669	-96.5	76.4	34.3	48.1	40.1	153.31552	12-13
14	-16.179	-16.280	1465.36508	-50.4	13.1	-85.2	34.7	23.79716	0.752	-95.9	72.3	38.0	41.5	31.8	124.99208	13-14
15	-12.799	-17.091	1419.98289	-58.1	10.7	-83.1	29.9	23.13668	0.802	-90.8	71.1	37.8	36.9	32.2	105.13133	14-15
16	-9.916	-17.664	1392.13670	-66.5	8.8	-81.6	25.4	22.64333	0.835	-86.2	70.3	37.9	33.7	32.1	88.95735	15-16

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JULY 31, 1964 13 HR 16 MIN 10 SEC 312 MS TAB NO 88 ATLAS PHOTO NO 88 POD SEQUENCE NO 179

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
578.487 1249.31485 -5.233 -31.914 2984.770 2.115 -71.874 116.533

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.767	-13.143	1478.29689	-62.6	12.3	-84.2	27.4	24.14163	0.723	-90.9	75.0	34.0	43.7	40.0	0.	1-2
3	-11.198	-15.566	1423.39412	-64.6	10.3	-82.6	26.3	23.22009	0.784	-88.3	72.5	35.9	38.4	36.0	86.07812	2-3
4	-11.102	-11.397	1502.40533	-68.1	11.7	-83.4	23.8	24.50180	0.699	-88.1	76.6	32.2	45.7	44.0	123.91708	3-4
5	-14.520	-10.310	1548.60149	-61.0	14.6	-86.4	28.5	25.26224	0.652	-93.8	77.8	32.2	49.4	44.4	108.39736	4-5
6	-14.424	-14.773	1462.05684	-56.7	12.7	-84.7	31.0	23.84367	0.742	-93.5	73.5	36.0	42.2	36.0	130.91595	5-6
7	-11.198	-15.566	1423.39412	-64.6	10.3	-82.6	26.3	23.22009	0.784	-88.3	72.5	35.9	38.4	36.0	100.47529	6-7
8	-9.927	-17.671	1381.27467	-66.4	8.8	-81.6	25.4	22.46666	0.835	-86.2	70.3	37.8	33.7	32.1	73.55606	7-8
9	-9.763	-13.900	1446.21155	-70.1	10.0	-82.0	23.0	23.56378	0.759	-85.8	74.0	34.1	40.7	39.6	112.63815	8-9
10	-9.586	-9.450	1537.06767	-72.7	11.2	-82.5	20.6	24.97217	0.665	-85.4	78.4	30.4	55.5	47.8	132.98300	9-10
11	-12.777	-8.467	1576.54269	-66.1	13.9	-85.6	25.0	25.68710	0.625	-91.0	79.6	30.3	51.4	48.7	101.53401	10-11
12	-16.593	-6.822	1642.19290	-59.5	17.6	-90.0	29.7	26.69920	0.564	-97.2	81.3	30.6	55.8	49.4	124.50623	11-12
13	-16.314	-12.041	1530.86526	-55.5	15.3	-87.1	32.1	24.93090	0.670	-96.5	76.3	34.3	48.0	40.0	151.84021	12-13
14	-16.141	-16.299	1453.86481	-50.4	13.1	-85.2	34.7	23.61046	0.753	-95.9	72.2	38.0	41.4	31.8	123.94154	13-14
15	-12.787	-17.102	1408.90109	-58.1	10.7	-83.1	29.9	22.95613	0.802	-90.8	71.1	37.8	36.9	32.2	104.28090	14-15
16	-9.927	-17.671	1381.27467	-66.4	8.8	-81.6	25.4	22.46666	0.835	-86.2	70.3	37.8	33.7	32.1	88.26237	15-16

JULY 31, 1964 13 HR 16 MIN 15 SEC 432 MS TAB NO 89 ATLAS PHOTO NO 89 POD SEQUENCE NO 181

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
573.367 1239.01782 -5.262 -31.856 2974.473 2.118 -71.832 116.526

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.755	-13.188	1466.57556	-62.6	12.3	-84.2	27.4	23.95021	0.724	-90.9	74.9	34.0	43.6	40.0	0.	1-2
3	-11.199	-15.590	1412.16383	-64.6	10.3	-82.6	26.3	23.03689	0.785	-88.3	72.5	35.9	38.4	36.0	85.36084	2-3
4	-11.103	-11.457	1490.43965	-68.1	11.7	-83.4	23.9	24.30668	0.699	-88.1	76.5	32.2	45.7	43.9	122.86477	3-4
5	-14.494	-10.381	1536.18201	-61.0	14.6	-86.4	28.5	25.05965	0.653	-93.8	77.8	32.2	49.3	44.3	107.49469	4-5
6	-14.399	-14.804	1450.47984	-56.8	12.7	-84.7	31.0	23.65489	0.742	-93.5	73.5	36.0	42.2	36.0	129.77116	5-6
7	-11.197	-15.590	1412.16383	-64.6	10.3	-82.6	26.3	23.03689	0.785	-88.3	72.5	35.9	38.4	36.0	99.66492	6-7
8	-9.938	-17.678	1370.38863	-66.4	8.8	-81.6	25.4	22.28960	0.835	-86.2	70.3	37.8	33.7	32.1	72.96904	7-8
9	-9.775	-13.938	1434.76515	-70.0	10.0	-82.0	23.0	23.37730	0.760	-85.8	74.0	34.1	40.7	39.6	111.72086	8-9
10	-9.600	-9.527	1524.72275	-72.7	11.2	-82.5	20.6	24.77168	0.666	-85.4	78.3	30.4	48.4	47.7	131.80318	9-10
11	-12.766	-8.495	1563.81454	-66.1	13.9	-85.6	25.0	25.47573	0.626	-91.0	79.5	30.3	51.3	48.6	100.69073	10-11
12	-16.548	-6.931	1628.70763	-59.5	17.5	-90.0	29.7	26.47997	0.565	-97.2	81.2	30.6	55.7	49.3	123.37471	11-12
13	-16.273	-12.098	1518.61636	-55.5	15.2	-87.1	32.1	24.73146	0.671	-96.5	76.3	34.3	48.0	40.0	150.36359	12-13
14	-16.103	-16.319	1442.33557	-50.5	13.1	-85.2	34.6	23.42329	0.753	-95.9	72.2	38.0	41.4	31.8	122.88781	13-14
15	-12.776	-17.114	1397.79248	-58.1	10.7	-83.1	29.9	22.77514	0.802	-90.8	71.1	37.8	36.9	32.2	103.42781	14-15
16	-9.938	-17.678	1370.38863	-66.4	8.8	-81.6	25.4	22.28960	0.835	-86.2	70.3	37.8	33.7	32.1	87.56505	15-16

JULY 31, 1964 13 HR 16 MIN 20 SEC 592 MS TAB NO 90 ATLAS PHOTO NO 90 POD SEQUENCE NO 183

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
568.247 1228.71033 -5.291 -31.797 2964.166 2.120 -71.789 116.518

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.743	-13.234	1454.81316	-62.6	12.3	-84.2	27.4	23.75812	0.724	-90.9	74.9	34.0	43.6	40.0	0.	1-2
3	-11.200	-15.615	1400.89775	-64.5	10.3	-82.6	26.3	22.85311	0.785	-88.3	72.4	35.9	38.4	35.9	84.63903	2-3
4	-11.104	-11.518	1478.43317	-68.1	11.7	-83.4	23.9	24.11089	0.700	-88.1	76.4	32.2	45.6	43.8	121.80746	3-4
5	-14.467	-10.453	1523.71948	-61.0	14.6	-86.4	28.5	24.85629	0.654	-93.8	77.7	32.2	49.2	44.3	106.58693	4-5
6	-14.374	-14.837	1438.66165	-56.8	12.7	-84.7	30.9	23.46543	0.742	-93.5	73.5	36.0	42.1	35.9	128.62043	5-6
7	-11.200	-15.615	1400.89775	-64.5	10.3	-82.6	26.3	22.85311	0.785	-88.3	72.4	35.9	38.4	35.9	98.85050	6-7
8	-9.949	-17.686	1359.47113	-66.4	8.8	-81.6	25.4	22.11203	0.835	-86.2	70.3	37.8	33.7	32.1	72.37827	7-8
9	-9.787	-13.977	1423.28290	-70.0	10.0	-82.0	23.0	23.19024	0.760	-85.8	73.9	34.1	40.6	39.6	110.79924	8-9
10	-9.613	-9.606	1512.33737	-72.7	11.2	-82.4	20.7	24.57054	0.667	-85.4	78.2	30.4	48.4	47.7	130.61856	9-10
11	-12.754	-8.584	1541.03990	-66.1	13.9	-85.6	25.0	25.27160	0.627	-91.0	79.4	30.3	51.3	48.5	99.84284	10-11
12	-16.503	-6.041	1615.16927	-59.5	17.5	-89.9	29.6	26.25987	0.567	-97.2	81.1	30.6	55.6	49.1	122.23719	11-12
13	-16.232	-12.156	1506.32022	-55.5	15.2	-87.0	32.1	24.53125	0.672	-96.5	76.2	34.3	47.9	39.9	148.88087	12-13
14	-16.063	-16.340	1430.76505	-50.5	13.0	-85.2	34.6	23.23545	0.754	-95.9	72.2	38.0	41.4	31.8	121.82814	13-14
15	-12.764	-17.127	1386.64867	-58.1	10.6	-83.1	29.9	22.59356	0.802	-90.8	71.1	37.8	36.8	32.2	102.57029	14-15
16	-9.949	-17.686	1359.47113	-66.4	8.8	-81.6	25.4	22.11203	0.835	-86.2	70.3	37.8	33.7	32.1	86.86442	15-16

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 16 MIN 25 SEC 672 MS TAB NO 91 ATLAS PHOTO NO 91 POD SEQUENCE NO 185

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
563.127 1218.39203 -5.321 -31.738 2953.847 2.123 -71.746 116.510

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.730	-13.280	1443.03278	-62.6	12.2	-84.1	27.4	23.56574	0.725	-90.9	74.8	34.0	43.5	39.9	0.	1-2
3	-11.200	-15.641	1389.61377	-64.5	10.3	-82.6	26.3	22.66903	0.785	-88.3	72.4	35.9	38.4	35.9	83.91645	2-3
4	-11.105	-11.579	1466.40913	-68.0	11.7	-83.3	23.9	23.91481	0.701	-88.1	76.4	32.2	45.6	43.8	120.74955	3-4
5	-14.440	-10.526	1511.23227	-61.0	14.5	-86.4	28.5	24.65265	0.655	-93.8	77.6	32.2	49.2	44.2	105.67857	4-5
6	-14.348	-14.870	1427.22562	-56.8	12.7	-84.7	30.9	23.27568	0.743	-93.5	73.4	36.0	42.1	35.9	127.46974	5-6
7	-11.200	-15.641	1389.61377	-64.5	10.3	-82.6	26.3	22.66903	0.785	-88.3	72.4	35.9	38.4	35.9	98.03492	6-7
8	-9.959	-17.695	1348.53636	-66.4	8.8	-81.6	25.4	21.93418	0.835	-86.2	70.3	37.8	33.7	32.1	71.78662	7-8
9	-9.799	-14.016	1411.78287	-70.0	10.0	-82.0	23.1	23.00288	0.761	-85.8	73.9	34.1	40.6	39.5	109.67643	8-9
10	-9.626	-9.684	1499.93564	-72.6	11.2	-82.4	20.7	24.36913	0.668	-85.4	78.2	30.4	48.3	47.6	129.43421	9-10
11	-12.741	-8.674	1538.24963	-66.0	13.9	-85.5	25.0	25.06321	0.628	-91.0	79.3	30.3	51.2	48.4	98.99431	10-11
12	-16.457	-7.151	1601.61931	-59.2	17.4	-89.8	29.6	26.03959	0.569	-97.2	81.0	30.6	55.5	49.0	121.10141	11-12
13	-16.190	-12.214	1494.00714	-55.6	15.2	-87.0	32.1	24.33076	0.673	-96.5	76.2	34.3	47.8	39.9	147.40178	12-13
14	-16.023	-16.361	1419.17717	-50.6	13.0	-85.2	34.6	23.04732	0.754	-95.9	72.2	38.0	41.3	31.7	120.76795	13-14
15	-12.751	-17.141	1375.48682	-58.1	10.6	-83.1	29.8	22.41170	0.802	-90.8	71.1	37.8	36.8	32.2	101.71184	14-15
16	-9.959	-17.695	1348.53636	-66.4	8.8	-81.6	25.4	21.93418	0.835	-86.2	70.3	37.8	33.7	32.1	86.16273	15-16

JULY 31, 1964 13 HR 16 MIN 30 SEC 792 MS TAB NO 92 ATLAS PHOTO NO 92 POD SEQUENCE NO 187

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
558.007 1208.06311 -5.350 -31.678 2943.518 2.126 -71.703 116.502

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.718	-13.326	1431.22868	-62.6	12.2	-84.1	27.4	23.37297	0.726	-90.9	74.8	34.0	43.5	39.9	0.	1-2
3	-11.200	-15.666	1378.30779	-64.5	10.3	-82.6	26.3	22.48459	0.785	-88.3	72.4	35.9	38.3	35.9	83.19202	2-3
4	-11.106	-11.640	1454.36314	-68.0	11.7	-83.3	23.9	23.71838	0.701	-88.1	76.3	32.2	45.5	43.7	119.69081	3-4
5	-14.412	-10.599	1498.72432	-61.0	14.5	-86.3	28.5	24.44861	0.656	-93.8	77.6	32.2	49.1	44.1	104.76775	4-5
6	-14.322	-14.903	1415.56465	-56.8	12.6	-84.7	30.9	23.08552	0.743	-93.5	73.4	36.0	42.0	35.9	126.31808	5-6
7	-11.200	-15.666	1378.30779	-64.5	10.3	-82.6	26.3	22.48459	0.785	-88.3	72.4	35.9	38.3	35.9	97.21697	6-7
8	-9.969	-17.703	1337.58131	-66.4	8.8	-81.6	25.5	21.75600	0.835	-86.2	70.3	37.8	33.7	32.1	71.19322	7-8
9	-9.810	-14.056	1400.26208	-69.9	10.0	-82.0	23.1	22.81519	0.761	-85.8	73.9	34.1	40.6	39.5	108.95226	8-9
10	-9.639	-9.763	1487.51447	-72.6	11.2	-82.4	20.8	24.16740	0.669	-85.4	78.1	30.4	48.2	47.5	128.24997	9-10
11	-12.727	-8.764	1525.43724	-66.0	13.8	-85.5	25.0	24.85447	0.629	-91.0	79.2	30.3	51.1	48.3	98.14371	10-11
12	-16.411	-7.262	1588.04631	-59.5	17.3	-89.8	29.6	25.81893	0.570	-97.2	80.9	30.6	55.4	48.9	119.96411	11-12
13	-16.148	-12.273	1481.66776	-55.6	15.1	-87.0	32.0	24.12984	0.674	-96.5	76.1	34.3	47.8	39.8	145.92434	12-13
14	-15.983	-16.383	1407.56345	-50.6	13.0	-85.2	34.5	22.85878	0.754	-95.9	72.2	38.0	41.3	31.7	119.70622	13-14
15	-12.738	-17.154	1364.30193	-58.2	10.6	-83.1	29.8	22.22946	0.802	-90.8	71.1	37.8	36.8	32.2	100.85077	14-15
16	-9.969	-17.703	1337.58131	-66.4	8.8	-81.6	25.5	21.75600	0.835	-86.2	70.3	37.8	33.7	32.1	85.45896	15-16

JULY 31, 1964 13 HR 16 MIN 35 SEC 912 MS TAB NO 93 ATLAS PHOTO NO 93 POD SEQUENCE NO 189

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
552.888 1197.72327 -5.380 -31.618 2933.179 2.129 -71.660 116.495

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.704	-13.373	1419.39699	-62.6	12.2	-84.1	27.4	23.17975	0.726	-90.9	74.7	34.0	43.4	39.8	0.	1-2
3	-11.199	-15.693	1366.97684	-64.5	10.3	-82.6	26.3	22.29975	0.786	-88.3	72.4	35.9	38.3	35.9	82.46510	2-3
4	-11.105	-11.702	1442.29202	-68.0	11.7	-83.3	24.0	23.52154	0.702	-88.1	76.3	32.2	45.5	43.7	118.63036	3-4
5	-14.384	-10.673	1486.18655	-61.0	14.5	-86.3	28.5	24.24409	0.657	-93.8	77.5	32.2	49.0	44.0	103.85349	4-5
6	-14.295	-14.937	1403.87419	-56.8	12.6	-84.7	30.9	22.89489	0.744	-93.5	73.4	36.0	42.0	35.8	125.16487	5-6
7	-11.199	-15.693	1366.97684	-64.5	10.3	-82.6	26.3	22.29975	0.786	-88.3	72.4	35.9	38.3	35.9	96.39551	6-7
8	-9.978	-17.712	1326.60367	-66.4	8.8	-81.6	25.5	21.57745	0.835	-86.2	70.3	37.8	33.7	32.1	70.59760	7-8
9	-9.820	-14.095	1388.71808	-69.9	10.0	-82.0	23.1	22.62712	0.761	-85.8	73.8	34.1	40.5	39.4	108.02656	8-9
10	-9.651	-9.843	1475.07115	-72.6	11.2	-82.4	20.8	23.96532	0.670	-85.4	78.0	30.4	48.1	47.4	127.06551	9-10
11	-12.713	-8.855	1512.59827	-66.0	13.8	-85.5	25.0	24.64529	0.631	-91.0	79.1	30.3	51.0	48.2	97.29006	10-11
12	-16.364	-7.373	1574.44325	-59.6	17.3	-89.7	29.6	25.59778	0.572	-97.2	80.8	30.6	55.3	48.8	118.82392	11-12
13	-16.105	-12.333	1469.29607	-55.6	15.1	-87.0	32.0	23.92840	0.675	-96.5	76.0	34.3	47.7	39.7	144.44759	12-13
14	-15.942	-16.405	1395.91867	-50.6	12.9	-85.2	34.5	22.66974	0.755	-95.9	72.1	38.0	41.2	31.7	118.64214	13-14
15	-12.725	-17.168	1353.09045	-58.2	10.6	-83.1	29.8	22.04679	0.802	-90.8	71.1	37.8	36.8	32.2	99.98613	14-15
16	-9.978	-17.712	1326.60367	-66.4	8.8	-81.6	25.5	21.57745	0.835	-86.2	70.3	37.8	33.7	32.1	84.75245	15-16

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TAB NO 94 ATLAS PHOTO NO 94 POD SEQUENCE NO 191																
JULY 31,1964 13 HR 16 MIN 41 SEC 32 MS																
TRAJECTORY DATA																
SEC TO IMPACT 547.768 ALT 1187.37259 LAT -5.410 LON -31.558 R 2922.828 V 2.131 PTH -71.616 AZ 116.487																
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.690	-13.421	1407.54744	-62.6	12.2	-84.1	27.4	22.98624	0.727	-90.9	74.7	34.0	43.4	39.8	0.	1-2
3	-11.198	-15.719	1355.62801	-64.5	10.3	-82.6	26.3	22.11462	0.786	-88.3	72.3	35.9	38.3	35.8	81.73751	2-3
4	-11.105	-11.764	1430.20335	-68.0	11.7	-83.3	24.0	23.32441	0.703	-88.1	76.2	32.2	45.4	43.6	117.56954	3-4
5	-14.356	-10.747	1473.63240	-61.0	14.4	-86.3	28.4	24.03929	0.658	-93.8	77.4	32.2	48.9	44.0	102.93868	4-5
6	-14.268	-14.971	1392.16609	-56.8	12.6	-84.7	30.8	22.70397	0.744	-93.5	73.3	36.0	42.0	35.8	124.01174	5-6
7	-11.198	-15.719	1355.62801	-64.5	10.3	-82.6	26.3	22.11462	0.786	-88.3	72.3	35.9	38.3	35.8	95.57322	6-7
8	-9.987	-17.722	1315.60866	-66.3	8.8	-81.6	25.5	21.39861	0.836	-86.2	70.3	37.8	33.7	32.1	70.00109	7-8
9	-9.831	-14.136	1377.15623	-69.9	10.0	-81.9	23.1	22.43876	0.762	-85.8	73.8	34.1	40.5	39.4	107.09967	8-9
10	-9.662	-9.922	1462.61151	-72.6	11.2	-82.4	20.8	23.76297	0.671	-85.4	77.9	30.4	48.1	47.4	125.88144	9-10
11	-12.694	-8.945	1499.74393	-66.0	13.8	-85.4	25.0	24.43586	0.632	-91.0	79.1	30.3	50.9	48.1	96.43601	10-11
12	-16.317	-7.484	1560.82918	-59.6	17.2	-89.6	29.6	25.37645	0.574	-97.2	80.7	30.6	55.2	48.7	117.68538	11-12
13	-16.061	-12.392	1456.90794	-55.6	15.0	-87.0	32.0	23.72669	0.675	-96.5	76.0	34.3	47.6	39.7	142.97449	12-13
14	-15.901	-16.427	1384.25681	-50.7	12.9	-85.2	34.4	22.48041	0.755	-95.9	72.1	38.0	41.2	31.7	117.57773	13-14
15	-12.711	-17.182	1341.86133	-58.2	10.6	-83.1	29.8	21.86384	0.803	-90.8	71.0	37.8	36.8	32.2	99.12088	14-15
16	-9.987	-17.722	1315.60866	-66.3	8.8	-81.6	25.5	21.39861	0.836	-86.2	70.3	37.8	33.7	32.1	84.04480	15-16

JULY 31, 1964 13 HR 16 MIN 46 SEC 152 MS															TAB NO 95		ATLAS PHOTO NO 95		POD SEQUENCE NO 193						
TRAJECTORY DATA										SEC TO IMPACT 542.648		ALT 1177.01105		LAT -5.440		LON -31.497		R 2912.466		V 2.134		PTH -71.572		AZ 116.479	
PHOTO DATA																									
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-12.676	-13.469	1395.66177	-62.6	12.2	-84.1	27.4	22.79214	0.727	-90.9	74.7	34.0	43.3	39.7	0.	1-2									
3	-11.197	-15.746	1344.24623	-64.5	10.3	-82.6	26.3	21.92894	0.786	-88.3	72.3	35.9	38.3	35.8	81.00685	2-3									
4	-11.105	-11.827	1418.07639	-68.0	11.7	-83.3	24.0	23.12666	0.704	-88.1	76.1	32.2	45.3	43.5	116.50361	3-4									
5	-14.327	-10.822	1461.03896	-61.0	14.4	-86.3	28.4	23.83386	0.659	-93.8	77.3	32.2	48.9	43.9	102.02133	4-5									
6	-14.241	-15.007	1380.42404	-56.9	12.5	-84.7	30.8	22.51249	0.745	-93.5	73.3	36.0	41.9	35.8	122.85349	5-6									
7	-11.197	-15.746	1344.24623	-64.5	10.3	-82.6	26.3	21.92894	0.786	-88.3	72.3	35.9	38.3	35.8	94.74864	6-7									
8	-9.996	-17.732	1304.58374	-66.3	8.8	-81.6	25.5	21.21929	0.836	-86.2	70.3	37.8	33.7	32.1	69.40170	7-8									
9	-9.841	-14.177	1365.55940	-69.9	10.0	-81.9	23.2	22.24983	0.762	-85.8	73.7	34.1	40.5	39.4	106.16816	8-9									
10	-9.674	-10.003	1450.11151	-72.5	11.2	-82.3	20.9	23.55997	0.672	-85.4	77.8	30.4	48.0	47.3	124.69203	9-10									
11	-12.684	-9.038	1486.84811	-66.0	13.7	-85.4	25.1	24.22576	0.633	-91.0	79.0	30.3	50.8	48.0	95.57923	10-11									
12	-16.270	-7.597	1547.17415	-59.6	17.1	-89.6	29.6	25.15445	0.575	-97.2	80.6	30.6	55.0	48.5	116.54528	11-12									
13	-16.018	-12.453	1444.44303	-55.6	15.0	-86.9	31.9	23.52438	0.676	-96.5	75.2	34.3	47.5	39.6	141.49702	12-13									
14	-15.859	-16.450	1372.56340	-50.7	12.9	-85.2	34.4	22.29058	0.756	-95.9	72.1	38.0	41.2	31.7	116.50836	13-14									
15	-12.697	-17.197	1350.60136	-58.2	10.6	-83.1	29.8	21.68038	0.803	-90.8	71.0	37.8	36.8	32.2	98.25329	14-15									
16	-9.996	-17.732	1304.58374	-66.3	8.8	-81.6	25.5	21.21929	0.836	-86.2	70.3	37.8	33.7	32.1	83.33530	15-16									

TAB NO 96															ATLAS PHOTO NO 96				POD SEQUENCE NO 195			
JULY 31, 1964 13 HR 16 MIN 51 SEC 272 MS																						
TRAJECTORY DATA																						
SEC TO IMPACT 537.528 ALT 1166.63852 LAT -5.471 LON -31.436 R 2902.094 V 2.137 PTH -71.527 AZ 116.471																						
PHOTO DATA																						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT						
2	-12.663	-13.519	1383.73677	-62.6	12.1	-84.1	27.4	22.59740	0.728	-90.9	74.6	34.0	43.3	39.7	0.	1-2						
3	-11.196	-15.775	1332.82892	-64.5	10.3	-82.6	26.3	21.74269	0.786	-88.3	72.3	35.9	38.2	35.8	80.27234	2-3						
4	-11.104	-11.892	1405.90764	-68.0	11.6	-83.3	24.0	22.92823	0.704	-88.1	76.1	32.2	45.3	43.5	115.43184	3-4						
5	-14.299	-10.899	1448.40250	-61.0	14.3	-86.2	28.4	23.62772	0.660	-93.8	77.3	32.2	48.8	43.8	101.10108	4-5						
6	-14.213	-15.043	1368.64531	-56.9	12.5	-84.7	30.8	22.32042	0.745	-93.5	73.3	36.0	41.9	35.7	121.68923	5-6						
7	-11.196	-15.775	1332.82892	-64.5	10.3	-82.6	26.3	21.74269	0.786	-88.3	72.3	35.9	38.2	35.8	93.92134	6-7						
8	-10.005	-17.743	1293.52669	-66.3	8.8	-81.6	25.5	21.03945	0.836	-86.2	70.3	37.8	33.7	32.0	68.79927	7-8						
9	-9.852	-14.219	1353.92462	-69.9	10.0	-81.9	23.2	22.06029	0.763	-85.8	73.7	34.1	40.4	39.3	105.23144	8-9						
10	-9.686	-10.086	1437.56723	-72.5	11.2	-82.3	20.9	23.55625	0.673	-85.4	77.8	30.4	47.9	47.2	123.49651	9-10						
11	-12.670	-9.131	1433.90666	-66.0	13.7	-85.4	25.1	24.01491	0.634	-91.0	78.9	30.3	50.7	47.9	94.71950	10-11						
12	-16.223	-7.711	1533.47363	-59.6	17.1	-89.5	29.6	24.93172	0.577	-97.2	80.5	30.6	54.9	48.4	115.40310	11-12						
13	-15.975	-12.515	1432.01787	-55.7	14.9	-86.9	31.9	23.32142	0.677	-96.5	75.9	34.3	47.5	39.6	140.01424	12-13						
14	-15.818	-16.475	1360.83589	-50.8	12.8	-85.2	34.3	22.10019	0.756	-95.9	72.0	38.0	41.1	31.7	115.43343	13-14						
15	-12.683	-17.213	1319.30814	-58.2	10.6	-83.1	29.7	21.49638	0.803	-90.8	71.0	37.8	36.7	32.1	97.38350	14-15						
16	-10.005	-17.743	1293.52669	-66.3	8.8	-81.6	25.5	21.03945	0.836	-86.2	70.3	37.8	33.7	32.0	82.62362	15-16						

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JULY 31, 1964 13 HR 16 MIN 56 SEC 391 MS

TAB NO 97

ATLAS PHOTO NO 97

POD SEQUENCE NO 197

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				532.408	1156.25516	-5.501	-31.374	2891.710	2.140	-71.483	116.463					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.649	-13.569	1371.79468	-62.6	12.1	-84.1	27.4	22.40237	0.728	-90.9	74.6	34.0	43.2	39.6	0.	1-2
3	-11.195	-15.804	1321.39423	-64.5	10.3	-82.6	26.3	21.55616	0.787	-88.3	72.3	35.9	38.2	35.8	79.53751	2-3
4	-11.104	-11.957	1393.72227	-68.0	11.6	-83.2	24.0	22.72952	0.705	-88.1	76.0	32.2	45.2	43.4	114.35977	3-4
5	-14.270	-10.976	1435.75069	-61.0	14.3	-86.2	28.4	23.42134	0.661	-93.8	77.2	32.2	48.7	43.7	100.18043	4-5
6	-14.186	-15.080	1356.84947	-56.9	12.5	-84.7	30.8	22.12866	0.746	-93.5	73.2	36.0	41.8	35.7	120.52544	5-6
7	-11.195	-15.804	1321.39423	-64.5	10.3	-82.6	26.3	21.55616	0.787	-88.3	72.3	35.9	38.2	35.8	93.09324	6-7
8	-10.014	-17.755	1282.45255	-66.3	8.8	-81.6	25.5	20.85933	0.836	-86.2	70.2	37.8	33.6	32.0	68.19597	7-8
9	-9.862	-14.262	1342.27267	-69.8	10.0	-81.9	23.2	21.87046	0.763	-85.8	73.7	34.1	40.4	39.3	104.29380	8-9
10	-9.695	-10.168	1425.00772	-72.5	11.2	-82.3	21.0	21.5227	0.674	-85.4	77.7	30.4	47.8	47.1	122.30173	9-10
11	-12.656	-9.225	1460.95113	-66.0	13.7	-85.3	25.1	23.80384	0.636	-91.0	78.8	30.3	50.6	47.8	93.85955	10-11
12	-16.176	-7.825	1519.76358	-59.6	17.0	-89.5	29.5	24.70883	0.579	-97.2	80.4	30.6	54.8	48.2	114.26273	11-12
13	-15.931	-12.576	1419.53714	-55.7	14.9	-86.9	31.9	23.11820	0.678	-96.5	75.8	34.3	47.4	39.5	138.53570	12-13
14	-15.776	-16.499	1349.09178	-50.8	12.8	-85.2	34.3	21.90953	0.757	-95.9	72.0	38.0	41.1	31.6	114.35835	13-14
15	-12.669	-17.230	1307.79768	-58.3	10.5	-83.2	29.7	21.31210	0.803	-90.8	71.0	37.8	36.7	32.1	96.51304	14-15
16	-10.014	-17.755	1282.45255	-66.3	8.8	-81.6	25.5	20.85933	0.836	-86.2	70.2	37.8	33.6	32.0	81.91072	15-16

JULY 31, 1964 13 HR 17 MIN 1 SEC 511 MS

TAB NO 98

ATLAS PHOTO NO 98

POD SEQUENCE NO 199

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				527.288	1145.86050	-5.532	-31.312	2881.316	2.143	-71.438	116.454					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.635	-13.621	1359.79401	-62.6	12.1	-84.1	27.4	22.20639	0.729	-90.9	74.5	34.0	43.2	39.6	0.	1-2
3	-11.194	-15.835	1309.90800	-64.5	10.3	-82.6	26.3	21.36878	0.787	-88.3	72.2	35.9	38.2	35.7	78.79638	2-3
4	-11.104	-12.024	1381.47331	-67.9	11.6	-83.2	24.1	22.52978	0.706	-88.1	75.9	32.2	45.1	43.3	113.27727	3-4
5	-14.261	-11.055	1423.03204	-61.0	14.3	-86.2	28.4	23.21386	0.662	-93.8	77.1	32.2	48.6	43.6	99.25492	4-5
6	-14.159	-15.119	1344.99974	-56.9	12.5	-84.7	30.7	21.43463	0.746	-93.5	73.2	36.0	41.8	35.7	119.35038	5-6
7	-11.194	-15.835	1309.90800	-64.5	10.3	-82.6	26.3	21.36878	0.787	-88.3	72.2	35.9	38.2	35.7	92.26124	6-7
8	-10.024	-17.768	1271.33292	-66.3	8.8	-81.6	25.5	20.67848	0.836	-86.2	70.2	37.8	33.6	32.0	67.58752	7-8
9	-9.873	-14.307	1330.56465	-69.8	10.0	-81.9	23.3	21.67972	0.763	-85.8	73.6	34.1	40.3	39.2	103.34746	8-9
10	-9.710	-10.254	1412.37894	-72.4	11.2	-82.3	21.0	22.94718	0.675	-85.4	77.6	30.4	47.8	47.0	121.09513	9-10
11	-12.641	-9.322	1447.92290	-66.0	13.7	-85.3	25.1	23.59157	0.637	-91.0	78.7	30.3	50.5	47.7	92.99438	10-11
12	-16.128	-7.942	1505.97734	-59.6	17.0	-89.4	29.5	24.48471	0.581	-97.2	80.2	30.6	54.7	48.2	113.11688	11-12
13	-15.888	-12.643	1406.99490	-55.7	14.8	-86.9	31.8	22.91399	0.679	-96.5	75.7	34.3	47.3	39.4	137.04386	12-13
14	-15.734	-16.526	1337.29822	-50.8	12.8	-85.2	34.2	21.71808	0.757	-95.9	72.0	38.0	41.0	31.6	113.27313	13-14
15	-12.655	-17.249	1296.63982	-58.3	10.5	-83.2	29.7	21.12704	0.804	-90.8	71.0	37.8	36.7	32.1	95.63883	14-15
16	-10.024	-17.768	1271.33292	-66.3	8.8	-81.6	25.5	20.67848	0.836	-86.2	70.2	37.8	33.6	32.0	81.19471	15-16

JULY 31, 1964 13 HR 17 MIN 6 SEC 631 MS

TAB NO 99

ATLAS PHOTO NO 99

POD SEQUENCE NO 201

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				522.168	1135.45468	-5.563	-31.249	2870.910	2.146	-71.392	116.446					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.621	-13.676	1347.74051	-62.6	12.1	-84.0	27.4	22.00955	0.730	-90.9	74.4	34.0	43.1	39.5	0.	1-2
3	-11.193	-15.868	1298.37494	-64.5	10.3	-82.6	26.4	21.18064	0.787	-88.3	72.2	35.9	38.1	35.7	78.06968	2-3
4	-11.103	-12.094	1369.16733	-67.9	11.6	-83.2	24.1	22.32911	0.707	-88.1	75.9	32.2	45.1	43.3	112.18582	3-4
5	-14.131	-11.137	1410.25380	-61.0	14.2	-86.2	28.4	23.00541	0.663	-93.8	77.0	32.2	48.5	43.6	98.32480	4-5
6	-14.131	-15.160	1333.10118	-56.9	12.4	-84.7	30.7	21.74060	0.747	-93.5	73.1	36.0	41.7	35.6	118.16582	5-6
7	-11.193	-15.868	1298.37494	-64.5	10.3	-82.6	26.4	21.18064	0.787	-88.3	72.2	35.9	38.1	35.7	91.42558	6-7
8	-10.033	-17.783	1260.17149	-66.3	8.8	-81.6	25.6	20.49694	0.836	-86.2	70.2	37.8	33.6	32.0	66.97470	7-8
9	-9.883	-14.354	1318.80597	-69.8	10.0	-81.9	23.3	21.48815	0.764	-85.8	73.6	34.1	40.3	39.2	102.39355	8-9
10	-9.722	-10.341	1399.68861	-72.4	11.1	-82.3	21.1	22.74109	0.676	-85.4	77.5	30.4	47.7	46.9	119.87873	9-10
11	-12.627	-9.421	1434.83041	-66.0	13.6	-85.3	25.1	23.37827	0.638	-91.0	78.6	30.3	50.4	47.6	92.12466	10-11
12	-16.081	-8.062	1492.12468	-59.6	16.9	-89.3	29.5	24.25950	0.582	-97.2	80.1	30.6	54.5	48.0	111.96661	11-12
13	-15.844	-12.710	1394.39761	-55.7	14.8	-86.9	31.8	22.70888	0.680	-96.5	75.7	34.3	47.2	39.3	135.54151	12-13
14	-15.692	-16.555	1325.45959	-50.9	12.7	-85.2	34.2	21.52589	0.758	-95.9	72.0	38.0	41.0	31.6	112.17929	13-14
15	-12.641	-17.269	1285.23860	-58.3	10.5	-83.2	29.7	20.94128	0.804	-90.8	71.0	37.8	36.7	32.1	94.76150	14-15
16	-10.033	-17.783	1260.17149	-66.3	8.8	-81.6	25.6	20.49694	0.836	-86.2	70.2	37.8	33.6	32.0	80.47570	15-16

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JULY 31, 1964 13 HR 17 MIN 11 SEC 751 MS TAB NO 100 ATLAS PHOTO NO 100 POD SEQUENCE NO 203

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				517.048		1125.03772	-5.594	-31.186	2860.493	2.149	-71.347	116.438				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.607	-13.731	1335.67105	-62.6	12.1	-84.0	27.4	21.81245	0.731	-90.9	74.4	34.0	43.1	39.5	0.	1-2
3	-11.192	-15.901	1286.82523	-64.5	10.3	-82.5	26.4	20.99223	0.788	-88.3	72.2	35.9	38.1	35.7	77.30286	2-3
4	-11.103	-12.164	1356.84625	-67.9	11.6	-83.2	24.1	22.12819	0.708	-88.1	75.8	32.2	45.0	43.2	111.09463	3-4
5	-14.183	-11.219	1397.46199	-61.0	14.2	-86.1	28.4	22.79674	0.664	-93.8	77.0	32.2	48.4	43.5	97.39475	4-5
6	-14.103	-15.201	1321.18643	-56.9	12.4	-84.7	30.7	21.54651	0.748	-93.5	73.1	36.0	41.7	35.6	116.98231	5-6
7	-11.192	-15.901	1286.82523	-64.5	10.3	-82.5	26.4	20.99223	0.788	-88.3	72.2	35.9	38.1	35.7	90.58908	6-7
8	-10.042	-17.799	1248.99355	-66.2	8.8	-81.6	25.6	20.31513	0.836	-86.2	70.2	37.8	33.6	32.0	66.36130	7-8
9	-9.894	-14.402	1307.03110	-69.7	10.0	-81.9	23.4	21.29633	0.765	-85.8	73.5	34.1	40.3	39.1	101.43505	8-9
10	-9.734	-10.429	1386.98500	-72.4	11.1	-82.2	21.1	22.53476	0.677	-85.4	77.4	30.4	47.6	46.9	118.66377	9-10
11	-12.612	-9.520	1421.72609	-66.0	13.6	-85.2	25.1	23.16476	0.640	-91.0	78.5	30.3	50.3	47.5	91.25491	10-11
12	-16.033	-8.181	1478.26227	-59.6	16.8	-89.3	29.5	24.03418	0.584	-97.2	80.0	30.6	54.4	47.9	110.81866	11-12
13	-15.800	-12.777	1381.78621	-55.7	14.7	-86.8	31.8	22.50353	0.681	-96.5	75.6	34.3	47.2	39.3	134.04450	12-13
14	-15.651	-16.584	1313.60512	-50.9	12.7	-85.2	34.1	21.33345	0.759	-95.9	71.9	38.0	40.9	31.5	111.08587	13-14
15	-12.627	-17.290	1273.82074	-58.3	10.5	-83.2	29.7	20.75525	0.804	-90.8	70.9	37.8	36.6	32.1	93.88343	14-15
16	-10.042	-17.799	1248.99355	-66.2	8.8	-81.6	25.6	20.31513	0.836	-86.2	70.2	37.8	33.6	32.0	79.75588	15-16

JULY 31, 1964 13 HR 17 MIN 16 SEC 871 MS TAB NO 101 ATLAS PHOTO NO 101 POD SEQUENCE NO 205

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				511.928		1114.60941	-5.626	-31.122	2850.065	2.151	-71.301	116.429				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.593	-13.784	1323.61034	-62.6	12.0	-84.0	27.4	21.61549	0.731	-90.9	74.3	34.0	43.0	39.4	0.	1-2
3	-11.191	-15.933	1275.27882	-64.5	10.2	-82.5	26.4	20.80388	0.788	-88.3	72.1	35.9	38.1	35.6	76.55980	2-3
4	-11.103	-12.232	1344.53697	-67.9	11.6	-83.2	24.1	21.92747	0.709	-88.1	75.7	32.2	44.9	43.1	110.00931	3-4
5	-14.155	-11.299	1386.68776	-61.0	14.1	-86.1	28.4	22.58836	0.665	-93.8	76.9	32.2	48.4	43.4	96.46787	4-5
6	-14.076	-15.241	1309.27844	-57.0	12.4	-84.7	30.7	21.35233	0.748	-93.5	73.1	36.0	41.6	35.5	115.80665	5-6
7	-11.191	-15.933	1275.27882	-64.5	10.2	-82.5	26.4	20.80388	0.788	-88.3	72.1	35.9	38.1	35.6	89.75430	6-7
8	-10.051	-17.813	1237.81541	-66.2	8.8	-81.5	25.6	20.13332	0.836	-86.2	70.2	37.8	33.6	32.0	65.74981	7-8
9	-9.905	-14.448	1295.26190	-69.7	10.0	-81.9	23.4	21.10459	0.765	-85.8	73.5	34.1	40.2	39.1	100.48807	8-9
10	-9.746	-10.516	1374.79800	-72.3	11.1	-82.2	21.2	22.32874	0.678	-85.4	77.3	30.4	47.5	46.8	117.45690	9-10
11	-12.598	-9.618	1408.64389	-65.9	13.6	-85.2	25.2	22.95162	0.641	-91.0	78.4	30.3	50.2	47.4	90.38843	10-11
12	-15.986	-8.299	1466.43971	-59.6	16.8	-89.2	29.5	23.80942	0.586	-97.2	79.9	30.6	54.3	47.8	109.67867	11-12
13	-15.756	-12.843	1369.18962	-55.7	14.7	-86.8	31.8	22.29843	0.682	-96.5	75.5	34.3	47.1	39.2	132.56271	12-13
14	-15.609	-16.612	1301.75633	-50.9	12.6	-85.2	34.1	21.14109	0.759	-95.9	71.9	38.0	40.9	31.5	109.99869	13-14
15	-12.614	-17.309	1262.40466	-58.3	10.5	-83.2	29.7	20.56924	0.804	-90.8	70.9	37.8	36.6	32.0	93.00733	14-15
16	-10.051	-17.813	1237.81541	-66.2	8.8	-81.5	25.6	20.13332	0.836	-86.2	70.2	37.8	33.6	32.0	79.03656	15-16

JULY 31, 1964 13 HR 17 MIN 21 SEC 991 MS TAB NO 102 ATLAS PHOTO NO 102 POD SEQUENCE NO 207

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				506.808		1104.16980	-5.657	-31.058	2839.625	2.154	-71.255	116.421				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.579	-13.837	1311.54951	-62.6	12.0	-84.0	27.4	21.41853	0.732	-90.9	74.3	34.0	43.0	39.3	0.	1-2
3	-11.190	-15.965	1263.72861	-64.5	10.2	-82.5	26.4	20.61546	0.788	-88.3	72.1	35.9	38.0	35.6	75.81902	2-3
4	-11.102	-12.300	1332.22981	-67.9	11.6	-83.2	24.2	21.72678	0.709	-88.1	75.7	32.2	44.9	43.0	108.92778	3-4
5	-14.126	-11.379	1371.91988	-61.0	14.1	-86.1	28.4	22.38008	0.666	-93.8	76.8	32.2	48.3	43.3	95.54330	4-5
6	-14.049	-15.280	1297.36900	-57.0	12.3	-84.7	30.7	21.15812	0.749	-93.5	73.0	36.0	41.6	35.5	114.63640	5-6
7	-11.190	-15.965	1263.72861	-64.5	10.2	-82.5	26.4	20.61546	0.788	-88.3	72.1	35.9	38.0	35.6	88.92028	6-7
8	-10.061	-17.827	1226.63123	-66.2	8.8	-81.5	25.6	19.95141	0.836	-86.2	70.2	37.8	33.6	32.0	65.13951	7-8
9	-9.915	-14.494	1283.49057	-69.7	10.0	-81.9	23.4	20.91262	0.765	-85.8	73.4	34.1	40.2	39.0	99.53917	8-9
10	-9.759	-10.601	1361.61687	-72.3	11.1	-82.2	21.2	22.12279	0.679	-85.4	77.3	30.4	47.4	46.7	116.25567	9-10
11	-12.583	-9.715	1395.57155	-65.9	13.5	-85.2	25.2	22.73864	0.642	-91.0	78.3	30.3	50.1	47.3	89.52387	10-11
12	-15.934	-8.415	1450.63319	-59.6	16.7	-89.1	29.5	23.58496	0.588	-97.2	79.8	30.6	54.2	47.7	108.54463	11-12
13	-15.713	-12.908	1356.59747	-55.8	14.6	-86.8	31.7	22.09340	0.683	-96.5	75.5	34.3	47.0	39.1	131.09248	12-13
14	-15.567	-16.639	1289.90547	-51.0	12.6	-85.2	34.0	20.94870	0.760	-95.9	71.9	38.0	40.8	31.5	108.91560	13-14
15	-12.600	-17.328	1250.98383	-58.3	10.5	-83.2	29.7	20.38316	0.805	-90.8	70.9	37.8	36.6	32.0	92.13221	14-15
16	-10.061	-17.827	1226.63123	-66.2	8.8	-81.5	25.6	19.95141	0.836	-86.2	70.2	37.8	33.6	32.0	78.31742	15-16

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JULY 31, 1964 13 HR 17 MIN 27 SEC 111 MS

TAB NO 103

ATLAS PHOTO NO 103

POD SEQUENCE NO 209

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LON	R	V	PTH	AZ			
PHOTO DATA				501.689			1093.71863	-5.689	-30.993	2829.174	2.157	-71.208	116.412			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.566	-13.890	1299.47087	-62.6	12.0	-84.0	27.4	21.22128	0.732	-90.9	74.2	34.0	42.9	39.3	0.	1-2
3	-11.189	-15.997	1252.16017	-64.4	10.2	-82.5	26.4	20.42674	0.789	-88.3	72.1	35.9	38.0	35.6	75.07790	2-3
4	-11.102	-12.369	1319.90555	-67.8	11.6	-83.1	24.2	21.52580	0.710	-88.1	75.6	32.2	44.8	43.0	107.84614	3-4
5	-14.097	-11.459	1359.13605	-61.0	14.1	-86.0	28.4	22.17154	0.667	-93.8	76.7	32.2	48.2	43.2	94.61801	4-5
6	-14.021	-15.320	1285.44165	-57.0	12.3	-84.7	30.6	20.96362	0.749	-93.5	73.0	36.0	41.5	35.5	113.46669	5-6
7	-11.189	-15.997	1252.16017	-64.4	10.2	-82.5	26.4	20.42674	0.789	-88.3	72.1	35.9	38.0	35.6	88.08538	6-7
8	-10.070	-17.841	1215.42914	-66.2	8.8	-81.5	25.6	19.76921	0.837	-86.2	70.2	37.9	33.6	31.9	64.52834	7-8
9	-9.926	-14.539	1271.70137	-69.7	10.0	-81.8	23.4	20.72075	0.766	-85.8	73.4	34.1	40.1	39.0	98.58935	8-9
10	-9.771	-10.687	1348.92015	-72.3	11.1	-82.2	21.2	21.91658	0.680	-85.4	77.2	30.4	47.3	46.6	115.05536	9-10
11	-12.569	-9.812	1382.48474	-65.9	13.5	-85.2	25.2	22.52542	0.643	-91.0	78.2	30.3	50.1	47.2	88.65908	10-11
12	-15.891	-8.532	1436.81657	-59.6	16.6	-89.1	29.5	23.36034	0.590	-97.2	79.7	30.6	54.0	47.5	107.41222	11-12
13	-15.669	-12.973	1343.98885	-55.8	14.6	-86.8	31.7	21.88810	0.684	-96.5	75.4	34.3	46.9	39.1	129.62649	12-13
14	-15.525	-16.666	1278.03705	-51.0	12.6	-85.2	34.0	20.75602	0.760	-95.9	71.8	38.0	40.8	31.5	107.83251	13-14
15	-12.586	-17.347	1239.54482	-58.3	10.5	-83.2	29.7	20.19678	0.805	-90.8	70.9	37.8	36.6	32.0	91.25642	14-15
16	-10.070	-17.841	1215.42914	-66.2	8.8	-81.5	25.6	19.76921	0.837	-86.2	70.2	37.9	33.6	31.9	77.59704	15-16

JULY 31, 1964 13 HR 17 MIN 32 SEC 231 MS

TAB NO 104

ATLAS PHOTO NO 104

POD SEQUENCE NO 211

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
PHOTO DATA				496.569		1083.25610	-5.722	-30.928	2818.711	2.160	-71.162	116.404				
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.552	-13.945	1287.34076	-62.6	12.0	-84.0	27.4	21.02318	0.733	-90.9	74.2	34.0	42.8	39.2	0.	1-2
3	-11.188	-16.030	1240.54555	-64.4	10.2	-82.5	26.4	20.23727	0.789	-88.3	72.0	35.9	38.0	35.5	74.33178	2-3
4	-11.102	-12.439	1307.52495	-67.8	11.5	-83.1	24.2	21.32392	0.711	-88.1	75.5	32.2	44.7	42.9	106.75563	3-4
5	-14.089	-11.561	1346.29506	-61.0	14.0	-86.0	28.4	21.96207	0.669	-93.8	76.6	32.2	48.1	43.1	93.68935	4-5
6	-13.994	-15.362	1273.46748	-57.0	12.3	-84.7	30.6	20.76836	0.750	-93.5	72.9	36.0	41.5	35.4	112.28789	5-6
7	-11.188	-16.030	1240.54555	-64.4	10.2	-82.5	26.4	20.23727	0.789	-88.3	72.0	35.9	38.0	35.5	87.24740	6-7
8	-10.080	-17.857	1204.18547	-66.2	8.8	-81.5	25.6	19.58634	0.837	-86.2	70.2	37.9	33.6	31.9	63.91309	7-8
9	-9.937	-14.587	1259.86157	-69.6	10.0	-81.8	23.5	20.52787	0.767	-85.8	73.4	34.1	40.1	38.9	97.63197	8-9
10	-9.783	-10.776	1336.16193	-72.3	11.1	-82.2	21.3	21.70938	0.681	-85.4	77.1	30.4	47.3	46.5	113.84520	9-10
11	-12.555	-9.911	1369.33536	-65.9	13.5	-85.1	25.2	22.31119	0.645	-91.0	78.1	30.3	49.9	47.1	87.79039	10-11
12	-15.844	-8.650	1422.93733	-59.6	16.6	-89.0	29.5	23.13470	0.591	-97.2	79.6	30.6	53.9	47.4	106.27666	11-12
13	-15.625	-13.040	1331.32838	-55.8	14.5	-86.8	31.7	21.68196	0.685	-96.5	75.3	34.3	46.8	39.0	128.15065	12-13
14	-15.484	-16.695	1266.12640	-51.0	12.5	-85.2	34.0	20.56265	0.761	-95.9	71.8	38.0	40.7	31.4	106.74121	13-14
15	-12.572	-17.368	1228.06375	-58.3	10.4	-83.2	29.6	20.00972	0.805	-90.8	70.9	37.8	36.5	32.0	90.37790	14-15
16	-10.080	-17.857	1204.18547	-66.2	8.8	-81.5	25.6	19.58634	0.837	-86.2	70.2	37.9	33.6	31.9	76.87435	15-16

JULY 31, 1964 13 HR 17 MIN 37 SEC 351 MS

TAB NO 105

ATLAS PHOTO NO 105

POD SEQUENCE NO 213

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				491.449		1072.78186	-5.754	-30.863	2808.237	2.163	-71.114	116.395				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.538	-14.002	1275.17708	-62.6	11.9	-84.0	27.4	20.82454	0.734	-90.9	74.1	34.0	42.8	39.2	0.	1-2
3	-11.188	-16.065	1228.89948	-64.4	10.2	-82.5	26.4	20.04729	0.790	-88.3	72.0	35.9	37.9	35.5	73.58317	2-3
4	-11.102	-12.511	1295.10901	-67.8	11.5	-83.1	24.3	21.12145	0.712	-88.1	75.5	32.2	44.7	42.8	105.66112	3-4
5	-14.040	-11.624	1333.41904	-61.0	14.0	-86.0	28.4	21.75203	0.670	-93.8	76.6	32.2	48.0	43.0	92.75894	4-5
6	-13.967	-15.404	1261.46181	-57.0	12.3	-84.7	30.6	20.57258	0.751	-93.5	72.9	36.0	41.4	35.4	111.10530	5-6
7	-11.188	-16.065	1228.89948	-64.4	10.2	-82.5	26.4	20.04729	0.790	-88.3	72.0	35.9	37.9	35.5	86.40766	6-7
8	-10.090	-17.874	1192.91264	-66.1	8.8	-81.5	25.7	19.40299	0.837	-86.2	70.1	37.9	33.5	31.9	63.29544	7-8
9	-9.948	-14.636	1247.98849	-69.6	10.0	-81.8	23.5	20.33444	0.767	-85.8	73.3	34.1	40.0	38.9	96.67061	8-9
10	-9.796	-10.865	1323.36688	-72.2	11.1	-82.1	21.3	21.50158	0.682	-85.4	77.0	30.4	47.2	46.4	112.63116	9-10
11	-12.541	-10.011	1356.14925	-65.9	13.5	-85.1	25.2	22.09635	0.646	-91.0	78.0	30.3	49.8	47.0	86.91992	10-11
12	-15.797	-8.770	1409.02390	-59.6	16.5	-89.0	29.5	22.90851	0.593	-97.2	79.4	30.6	53.8	47.3	105.14051	11-12
13	-15.582	-13.109	1318.63501	-55.8	14.5	-86.7	31.7	21.47528	0.687	-96.5	75.3	34.3	46.8	38.9	126.67289	12-13
14	-15.442	-16.725	1254.18651	-51.1	12.5	-85.2	34.9	20.36881	0.761	-95.9	71.8	38.0	40.7	31.4	105.66610	13-14
15	-12.559	-17.390	1216.55318	-58.3	10.4	-83.2	29.6	19.82218	0.806	-90.8	70.8	37.8	36.5	31.9	89.49804	14-15
16	-10.090	-17.874	1192.91264	-66.1	8.8	-81.5	25.7	19.40299	0.837	-86.2	70.1	37.9	33.5	31.9	76.14973	15-16

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JULY 31, 1964 13 HR 17 MIN 42 SEC 471 MS TAB NO 106 ATLAS PHOTO NO 106 POD SEQUENCE NO 215

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
PHOTO DATA				486.329			1062.29617	-5.787	-30.796	2797.751	2.166	-71.067	116.386			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.525	-14.058	1262.99670	-62.6	11.9	-84.0	27.4	20.62563	0.735	-90.9	74.1	34.0	42.7	39.1	0.	1-2
3	-11.187	-16.100	1217.23601	-64.4	10.2	-82.5	26.4	19.85702	0.790	-88.3	72.0	35.9	37.9	35.4	72.83446	2-3
4	-11.102	-12.582	1282.67723	-67.8	11.5	-83.1	24.3	20.91872	0.713	-88.1	75.4	32.2	44.6	42.8	104.56683	3-4
5	-14.011	-11.708	1320.52858	-61.0	14.0	-86.0	28.4	21.54175	0.671	-93.8	76.5	32.3	47.9	42.9	91.82798	4-5
6	-13.939	-15.447	1249.43907	-57.0	12.2	-84.6	30.6	20.37653	0.751	-93.5	72.9	36.0	41.4	35.3	109.92379	5-6
7	-11.187	-16.100	1217.23601	-64.4	10.2	-82.5	26.4	19.85702	0.790	-88.3	72.0	35.9	37.9	35.4	85.56695	6-7
8	-10.099	-17.891	1181.62250	-66.1	8.8	-81.5	25.7	19.21936	0.837	-86.2	70.1	37.9	33.5	31.9	62.67716	7-8
9	-9.959	-14.685	1236.09860	-69.6	10.0	-81.8	23.6	20.14074	0.768	-85.8	73.3	34.1	40.0	38.8	95.70868	8-9
10	-9.808	-10.955	1310.55797	-72.2	11.1	-82.1	21.5	21.29355	0.684	-85.4	76.9	30.4	47.1	46.3	111.41860	9-10
11	-12.526	-10.112	1342.95050	-65.9	13.4	-85.0	25.3	21.88131	0.648	-91.0	77.9	30.3	49.7	46.9	86.04906	10-11
12	-15.749	-8.890	1395.10254	-59.6	16.4	-88.9	29.5	22.68219	0.595	-97.2	79.3	30.6	53.7	47.1	104.00671	11-12
13	-15.538	-13.177	1305.92654	-55.8	14.4	-86.7	31.6	21.26835	0.688	-96.5	75.2	34.3	46.7	38.8	125.20009	12-13
14	-15.400	-16.756	1242.29774	-51.1	12.5	-85.2	33.9	20.17470	0.762	-95.9	71.7	38.0	40.6	31.4	104.55146	13-14
15	-12.545	-17.412	1205.02509	-58.3	10.4	-83.2	29.6	19.63435	0.806	-90.8	70.8	37.8	36.5	31.9	88.61725	14-15
16	-10.099	-17.891	1181.62250	-66.1	8.8	-81.5	25.7	19.21936	0.837	-86.2	70.1	37.9	33.5	31.9	75.42410	15-16

JULY 31, 1964 13 HR 17 MIN 47 SEC 590 MS TAB NO 107 ATLAS PHOTO NO 107 POD SEQUENCE NO 217

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				481.209		1051.79861	-5.619	-30.730	2787.254	2.169	-71.019	116.377				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.511	-14.114	1290.81198	-62.6	11.9	-83.9	27.4	20.42864	0.735	-90.9	74.0	34.0	42.7	39.0	0.	1-2
3	-11.186	-16.134	1205.56531	-64.4	10.2	-82.5	26.5	19.66664	0.790	-88.3	71.9	35.9	37.9	35.4	72.08751	2-3
4	-11.102	-12.653	1270.24380	-67.7	11.5	-83.1	24.3	20.71597	0.714	-88.1	75.3	32.2	44.5	42.7	103.47592	3-4
5	-13.982	-11.790	1307.63913	-61.0	13.9	-85.9	28.4	21.33149	0.672	-93.8	76.4	32.3	47.8	42.9	90.89845	4-5
6	-13.912	-15.489	1237.41032	-57.0	12.2	-84.6	30.6	20.18037	0.752	-93.5	72.8	36.0	41.3	35.3	108.74689	5-6
7	-11.186	-16.134	1205.56531	-64.4	10.2	-82.5	26.5	19.66664	0.790	-88.3	71.9	35.9	37.9	35.4	84.72648	6-7
8	-10.109	-17.908	1170.32350	-66.1	8.8	-81.5	25.7	19.03558	0.837	-86.2	70.1	37.9	33.5	31.9	62.05951	7-8
9	-9.970	-14.734	1224.20346	-69.5	10.0	-81.8	23.6	19.94695	0.768	-85.8	73.2	34.1	39.9	38.8	94.74848	8-9
10	-9.821	-11.043	1297.75134	-72.1	11.1	-82.1	21.5	21.08555	0.685	-85.4	76.8	30.4	47.0	46.2	110.21117	9-10
11	-12.512	-10.212	1329.75665	-65.9	13.4	-85.0	25.3	21.66635	0.649	-91.0	77.8	30.3	49.6	46.8	85.17954	10-11
12	-15.702	-9.009	1381.19295	-59.6	16.4	-88.8	29.5	22.45605	0.597	-97.2	79.2	30.6	53.5	47.0	102.87698	11-12
13	-15.494	-13.245	1293.21677	-55.8	14.4	-86.7	31.6	21.06140	0.689	-96.5	75.1	34.3	46.6	38.8	123.73733	12-13
14	-15.358	-16.785	1230.26596	-51.1	12.4	-85.2	33.8	19.98047	0.763	-95.9	71.7	38.0	40.6	31.3	103.46013	13-14
15	-12.531	-17.434	1193.48842	-58.3	10.4	-83.2	29.6	19.44638	0.806	-90.8	70.8	37.8	36.4	31.9	87.73693	14-15
16	-10.109	-17.908	1170.32350	-66.1	8.8	-81.5	25.7	19.03558	0.837	-86.2	70.1	37.9	33.5	31.9	74.69808	15-16

JULY 31, 1964 13 HR 17 MIN 52 SEC 710 MS TAB NO 108 ATLAS PHOTO NO 108 POD SEQUENCE NO 219

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
PHOTO DATA										476.089	1041.28946	-5.653	-30.663	2776.745	2.172	-70.971	116.368
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.497	-14.169	1238.61470	-62.6	11.9	-83.9	27.4	20.22745	0.736	-90.9	74.0	34.1	42.6	39.0	0.	1-2	
3	-11.185	-16.168	1193.88063	-64.4	10.2	-82.5	26.5	19.47602	0.791	-88.3	71.9	35.9	37.8	35.4	71.34093	2-3	
4	-11.102	-12.724	1257.79927	-67.7	11.5	-83.0	24.3	20.51304	0.715	-88.1	75.3	32.2	44.5	42.6	102.38630	3-4	
5	-13.954	-11.873	1294.74043	-61.0	13.9	-85.9	28.4	21.12107	0.673	-93.8	76.3	32.3	47.7	42.8	89.96908	4-5	
6	-13.884	-15.531	1225.36821	-57.0	12.2	-84.6	30.6	19.98400	0.752	-93.5	72.8	36.0	41.3	35.2	107.57225	5-6	
7	-11.185	-16.168	1193.88063	-64.4	10.2	-82.5	26.5	19.47602	0.791	-88.3	71.9	35.9	37.8	35.4	83.88533	6-7	
8	-10.119	-17.924	1159.01003	-66.1	8.8	-81.5	25.7	18.85157	0.837	-86.2	70.1	37.9	33.5	31.8	61.44167	7-8	
9	-9.981	-14.782	1212.29532	-69.5	10.0	-81.8	23.6	19.75294	0.769	-85.8	73.2	34.2	39.9	38.7	93.78841	8-9	
10	-9.833	-11.132	1284.93617	-72.1	11.1	-82.1	21.5	20.87742	0.686	-85.4	76.8	30.4	46.9	46.1	109.00639	9-10	
11	-12.498	-10.311	1316.55589	-65.8	13.4	-85.0	25.3	21.45127	0.650	-91.0	77.7	30.3	49.5	46.7	84.31017	10-11	
12	-15.654	-9.127	1367.28177	-59.6	16.3	-88.8	29.4	22.22990	0.599	-97.2	79.1	30.6	53.4	46.9	101.75009	11-12	
13	-15.450	-13.312	1280.49651	-55.8	14.3	-86.7	31.6	20.85428	0.690	-96.5	75.0	34.3	46.5	38.7	122.28103	12-13	
14	-15.316	-16.815	1218.28859	-51.2	12.4	-85.2	33.6	19.72862	0.763	-95.9	71.7	38.0	40.5	31.3	102.37020	13-14	
15	-12.517	-17.455	1181.93724	-58.4	10.4	-83.1	29.6	19.25817	0.806	-90.8	70.8	37.8	36.4	31.9	86.85605	14-15	
16	-10.119	-17.924	1159.01003	-66.1	8.8	-81.5	25.7	18.85157	0.837	-86.2	70.1	37.9	33.5	31.8	73.97119	15-16	

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TAB NO 109

ATLAS PHOTO NO 109

POD SEQUENCE NO 221

JULY 31, 1964 13 HR 17 MIN 57 SEC 830 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				470.969		1030.76825	-5.886	-30.595	2766.224	2.176	-70.923	116.359				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.483	-14.225	1226.39931	-62.6	11.9	-83.9	27.4	20.02797	0.737	-90.9	73.9	34.1	42.5	38.9	0.	1-2
3	-11.184	-16.203	1182.17731	-64.4	10.2	-82.5	26.5	19.28511	0.791	-88.3	71.9	35.9	37.8	35.3	70.59411	2-3
4	-11.102	-12.795	1245.33752	-67.7	11.5	-83.0	24.4	20.30982	0.715	-88.1	75.2	32.2	44.4	42.5	101.29678	3-4
5	-13.925	-11.955	1281.82578	-61.0	13.8	-85.9	28.4	20.91040	0.674	-93.8	76.2	32.3	47.7	42.7	89.03930	4-5
6	-13.856	-15.573	1213.30777	-57.1	12.1	-84.6	30.5	19.78733	0.753	-93.5	72.7	36.0	41.2	35.2	106.39845	5-6
7	-11.184	-16.203	1182.17731	-64.4	10.2	-82.5	26.5	19.28511	0.791	-88.3	71.9	35.9	37.8	35.3	83.04328	6-7
8	-10.128	-17.941	1147.67807	-66.1	8.8	-81.5	25.8	18.66726	0.837	-86.2	70.1	37.9	33.5	31.8	60.82306	7-8
9	-9.992	-14.831	1200.36905	-69.5	10.0	-81.8	23.6	19.55865	0.769	-85.8	73.1	34.2	39.8	38.7	92.82763	8-9
10	-9.845	-11.221	1272.10558	-72.1	11.1	-82.1	21.6	20.66903	0.687	-85.4	76.7	30.4	46.8	46.0	107.80278	9-10
11	-12.483	-10.411	1303.34084	-65.8	13.3	-84.9	25.3	21.23596	0.652	-91.0	77.6	30.3	49.4	46.6	83.40408	10-11
12	-15.607	-9.245	1353.36063	-59.6	16.3	-88.7	29.4	22.00358	0.600	-97.2	79.0	36.6	53.3	46.7	100.62483	11-12
13	-15.406	-13.380	1267.75964	-55.9	14.3	-86.7	31.6	20.64689	0.691	-96.5	75.0	34.3	46.4	38.6	120.82930	12-13
14	-15.274	-16.845	1206.29315	-51.2	12.4	-85.2	33.7	19.59127	0.764	-95.9	71.6	38.0	40.5	31.3	101.28037	13-14
15	-12.503	-17.477	1170.36737	-58.4	10.4	-83.1	29.6	19.06966	0.807	-90.8	70.7	37.8	36.4	31.8	85.97449	14-15
16	-10.128	-17.941	1147.67807	-66.1	8.8	-81.5	25.8	18.66726	0.837	-86.2	70.1	37.9	33.5	31.8	73.24318	15-16

TAB NO 110

ATLAS PHOTO NO 110

POD SEQUENCE NO 223

JULY 31, 1964 13 HR 18 MIN 2 SEC 950 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				465.849			1020.23541	-5.920	-30.527	2755.691	2.179	-70.874	116.350			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INC	PHAZ	EMIS	ALPHA	SCALE	Pt-Pr
2	-12.468	-14.282	1214.14571	-62.5	11.8	-83.9	27.5	19.82785	0.737	-90.9	73.9	34.1	42.5	38.9	0.	1-2
3	-11.183	-16.238	1170.43947	-64.3	10.2	-82.5	26.5	19.09363	0.791	-88.3	71.8	35.9	37.8	35.3	69.84366	2-3
4	-11.101	-12.868	1232.83846	-67.7	11.5	-83.0	24.4	20.10600	0.716	-88.1	75.1	32.2	44.3	42.5	100.20377	3-4
5	-13.895	-12.039	1268.86938	-61.0	13.8	-85.8	28.4	20.69904	0.676	-93.8	76.1	32.3	47.6	42.6	88.10551	4-5
6	-13.828	-15.616	1201.20860	-57.1	12.1	-84.6	30.5	19.59003	0.754	-93.5	72.7	36.0	41.2	35.1	105.22084	5-6
7	-11.183	-16.238	1170.43947	-64.3	10.2	-82.5	26.5	19.09363	0.791	-88.3	71.8	35.9	37.8	35.3	82.1937	6-7
8	-10.137	-17.958	1136.31491	-66.0	8.8	-81.5	25.8	18.48244	0.838	-86.2	70.7	37.9	33.4	31.8	60.20149	7-8
9	-10.002	-14.881	1188.40868	-69.4	10.0	-81.8	23.7	19.36379	0.770	-85.8	73.1	34.2	39.8	38.6	91.86345	8-9
10	-9.857	-11.311	1259.23891	-72.0	11.1	-82.0	21.6	20.46006	0.688	-85.4	76.6	30.4	46.7	45.9	106.59634	9-10
11	-12.468	-10.512	1290.08540	-65.8	13.3	-84.9	25.4	21.02000	0.653	-91.0	77.5	30.3	49.3	46.5	82.56705	10-11
12	-15.558	-9.365	1339.39546	-59.6	16.2	-88.7	29.4	21.77654	0.602	-97.2	78.8	30.6	53.2	46.6	99.49573	11-12
13	-15.362	-13.449	1254.98022	-55.9	14.2	-86.6	31.5	20.43880	0.692	-96.5	74.9	34.3	46.3	38.5	119.37493	12-13
14	-15.231	-16.875	1194.25867	-51.2	12.3	-85.2	33.7	19.39589	0.764	-95.9	71.6	38.0	40.4	31.2	100.18641	13-14
15	-12.488	-17.500	1158.76253	-58.4	10.3	-83.1	29.6	18.88058	0.807	-90.8	70.7	37.8	36.4	31.8	85.08892	14-15
16	-10.137	-17.958	1136.31491	-66.0	8.8	-81.5	25.8	18.48244	0.838	-86.2	70.7	37.9	33.4	31.8	72.51217	15-16

TAB NO 111

ATLAS PHOTO NO 111

POD SEQUENCE NO 225

JULY 31, 1964 13 HR 18 MIN 8 SEC 70 MS

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LCN	R	V	PTH	AZ		
				460.729				1009.69043	-5.953	-30.458	2745.146	2.182	-70.825	116.341		
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.453	-14.340	1201.86964	-62.5	11.8	-83.9	27.5	19.62738	0.738	-90.9	73.8	34.1	42.4	38.8	0.	1-2
3	-11.181	-16.274	1158.67944	-64.3	10.2	-82.5	26.5	18.90179	0.792	-88.3	71.8	35.9	37.7	35.2	69.09241	2-3
4	-11.100	-12.940	1220.31779	-67.7	11.4	-83.0	24.4	19.90183	0.717	-88.1	75.1	32.2	44.2	42.4	99.11012	3-4
5	-13.865	-12.123	1255.89157	-61.0	13.8	-85.8	28.4	20.48734	0.677	-93.8	76.1	32.3	47.5	42.5	87.17063	4-5
6	-13.799	-15.660	1189.08667	-57.1	12.1	-84.6	30.5	19.39236	0.754	-93.5	72.6	36.0	41.1	35.1	104.04321	5-6
7	-11.181	-16.274	1158.67944	-64.3	10.2	-82.5	26.5	18.90179	0.792	-88.3	71.8	35.9	37.7	35.2	81.35018	6-7
8	-10.146	-17.976	1124.93033	-66.0	8.8	-81.5	25.8	18.29727	0.838	-86.2	70.1	37.9	33.4	31.8	59.57866	7-8
9	-10.013	-14.931	1176.42662	-69.4	10.0	-81.7	23.7	19.16859	0.770	-85.8	73.3	34.2	39.7	38.6	90.89805	8-9
10	-9.869	-11.401	1246.35239	-72.0	11.1	-82.0	21.7	20.25076	0.689	-85.4	76.5	30.4	46.6	45.8	105.39028	9-10
11	-12.453	-10.613	1276.81012	-65.8	13.3	-84.9	25.4	20.80371	0.654	-91.0	77.4	30.3	49.2	46.4	81.69270	10-11
12	-15.510	-9.484	1325.41328	-59.6	16.1	-88.6	29.4	21.54922	0.604	-97.2	78.7	30.6	53.0	46.5	98.36720	11-12
13	-15.316	-13.518	1242.17879	-55.9	14.2	-86.6	31.5	20.23036	0.693	-96.5	74.8	34.3	46.3	38.5	117.92360	12-13
14	-15.188	-16.906	1182.20152	-51.2	12.3	-85.2	33.7	19.20015	0.765	-95.9	71.6	38.0	40.4	31.2	99.09181	13-14
15	-12.474	-17.523	1147.13536	-58.4	10.3	-83.1	29.6	18.69114	0.807	-90.8	70.7	37.8	36.3	31.8	84.20202	14-15
16	-10.146	-17.976	1124.93033	-66.0	8.8	-81.5	25.8	18.29727	0.838	-86.2	70.1	37.9	33.4	31.8	71.77962	15-16

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JULY 31, 1964 13 HR 18 MIN 13 SEC 190 MS TAB NO 112 ATLAS PHOTO NO 112 POD SEQUENCE NO 227

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
PHOTO DATA				455.609			999.13345		-5.988		-30.389		2734.589		2.185		-70.776		116.331	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-12.439	-14.397	1189.57617	-62.5	11.8	-83.9	27.5	19.42662	0.739	-90.9	73.7	34.1	42.4	38.7	0.	1-2				
3	-11.179	-16.310	1146.90123	-64.3	10.1	-82.5	26.5	18.70965	0.792	-88.3	71.8	36.0	37.7	35.2	68.34096	2-3				
4	-11.099	-13.013	1207.78061	-67.6	11.4	-83.0	24.5	19.69738	0.718	-88.1	75.0	32.2	44.2	42.3	98.01674	3-4				
5	-13.835	-12.267	1242.89873	-61.0	13.7	-85.8	28.4	20.27539	0.678	-93.8	76.0	32.3	47.4	42.4	86.23552	4-5				
6	-13.770	-15.704	1176.94704	-57.1	12.0	-84.6	30.5	19.19439	0.755	-93.5	72.6	36.0	41.0	35.0	102.86662	5-6				
7	-11.179	-16.310	1146.90123	-64.3	10.1	-82.5	26.5	18.70965	0.792	-88.3	71.8	36.0	37.7	35.2	80.50195	6-7				
8	-10.155	-17.994	1113.52763	-66.0	8.8	-81.5	25.8	18.11181	0.838	-86.2	70.0	37.9	33.4	31.8	58.95516	7-8				
9	-10.023	-14.981	1164.42688	-69.4	10.0	-81.7	23.7	18.97369	0.771	-85.8	73.0	34.2	35.7	38.5	89.93198	8-9				
10	-9.880	-11.492	1233.45110	-72.0	11.1	-82.0	21.7	20.04122	0.690	-85.4	76.4	30.4	46.5	45.8	104.18558	9-10				
11	-12.437	-10.715	1263.52150	-65.8	13.2	-84.9	25.4	20.58720	0.656	-91.0	77.3	30.3	49.1	46.3	80.81811	10-11				
12	-15.461	-9.604	1311.42230	-59.6	16.1	-88.5	29.4	21.32177	0.606	-97.2	78.6	30.6	52.9	46.3	97.24062	11-12				
13	-15.271	-13.587	1229.36166	-55.9	14.1	-86.6	31.5	20.02166	0.694	-96.5	74.8	34.3	46.2	38.4	116.47702	12-13				
14	-15.145	-16.938	1170.12698	-51.3	12.2	-85.2	33.6	19.00411	0.766	-95.9	71.5	38.0	40.3	31.2	97.99752	13-14				
15	-12.459	-17.546	1135.48994	-58.4	10.3	-83.1	29.6	18.50140	0.808	-90.8	70.7	37.8	36.3	31.8	83.31449	14-15				
16	-10.155	-17.994	1113.52763	-66.0	8.8	-81.5	25.8	18.11181	0.838	-86.2	70.0	37.9	33.4	31.8	71.04587	15-16				

JULY 31, 1964 13 HR 18 MIN 18 SEC 310 MS TAB NO 113 ATLAS PHOTO NO 113 POD SEQUENCE NO 229

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				450.490			988.56409	-6.022	-30.319	2724.019	2.188	-70.726	116.322			
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.423	-14.456	1177.24838	-62.5	11.8	-83.9	27.5	19.22530	0.740	-90.9	73.7	34.1	42.3	38.7	0.	1-2
3	-11.177	-16.347	1135.09082	-64.3	10.1	-82.5	26.5	18.51698	0.793	-88.3	71.7	36.0	37.6	35.2	67.58708	2-3
4	-11.098	-13.087	1195.20822	-67.6	11.4	-83.0	24.5	19.49236	0.719	-88.1	74.9	32.2	44.1	42.2	96.91992	3-4
5	-13.805	-12.292	1229.87010	-61.0	13.7	-85.8	28.4	20.06286	0.679	-93.8	75.9	32.3	47.3	42.3	85.29811	4-5
6	-13.741	-15.748	1164.77426	-57.1	12.0	-84.6	30.5	18.99589	0.756	-93.5	72.5	36.0	41.0	35.0	101.68681	5-6
7	-11.177	-16.347	1135.09082	-64.3	10.1	-82.5	26.5	18.51698	0.793	-88.3	71.7	36.0	37.6	35.2	79.65143	6-7
8	-10.163	-18.013	1102.09497	-66.0	8.8	-81.5	25.8	17.92586	0.838	-86.2	70.0	37.9	33.4	31.7	58.32938	7-8
9	-10.033	-15.032	1152.39392	-69.4	10.0	-81.7	23.8	18.77705	0.771	-85.8	72.9	34.2	39.6	38.5	88.96244	8-9
10	-9.892	-11.583	1220.51419	-71.9	11.1	-82.0	21.8	19.83111	0.692	-85.4	76.3	30.5	46.4	45.7	102.97782	9-10
11	-12.422	-10.817	1250.19649	-65.8	13.2	-84.8	25.4	20.37010	0.657	-91.0	77.2	30.3	49.0	46.2	79.94117	10-11
12	-15.413	-9.725	1297.39633	-59.6	16.0	-88.5	29.4	21.09374	0.608	-97.2	78.5	30.6	52.8	46.2	96.11300	11-12
13	-15.226	-13.658	1216.50998	-55.9	14.1	-86.6	31.5	19.81240	0.695	-96.5	74.7	34.3	46.1	38.3	115.02900	12-13
14	-15.102	-16.970	1158.02075	-51.3	12.2	-85.2	33.6	18.80757	0.766	-95.9	71.5	38.0	40.3	31.1	96.89982	13-14
15	-12.443	-17.570	1123.81351	-58.4	10.3	-83.1	29.6	18.31115	0.808	-90.8	70.7	37.8	36.3	31.7	82.42482	14-15
16	-10.163	-18.013	1102.09497	-66.0	8.8	-81.5	25.8	17.92586	0.838	-86.2	70.0	37.9	33.4	31.7	70.31029	15-16

JULY 31, 1964 13 HR 18 MIN 23 SEC 430 MS TAB NO 114 ATLAS PHOTO NO 114 POD SEQUENCE NO 231

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				445.370	977.98270	-6.057	-30.249	2713.438	2.191	-70.676	116.312					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.408	-14.514	1164.90115	-62.5	11.7	-83.8	27.5	19.02366	0.740	-90.9	73.6	34.1	42.2	38.6	0.	1-2
3	-11.175	-16.384	1123.26051	-64.3	10.1	-82.4	26.6	18.32399	0.793	-88.3	71.7	36.0	37.6	35.1	66.83293	2-3
4	-11.096	-13.160	1162.61710	-67.6	11.4	-82.9	24.5	19.28704	0.720	-88.1	74.8	32.2	44.0	42.1	95.82288	3-4
5	-13.774	-12.378	1216.82404	-61.0	13.6	-85.7	28.4	19.85004	0.680	-93.8	75.8	32.3	47.2	42.2	84.36021	4-5
6	-13.712	-15.793	1152.58200	-57.1	12.0	-84.6	30.5	18.79707	0.756	-93.5	72.5	36.0	40.9	34.9	100.50757	5-6
7	-11.175	-16.384	1123.26051	-64.3	10.1	-82.4	26.6	18.32399	0.793	-88.3	71.7	36.0	37.6	35.1	78.80013	6-7
8	-10.172	-18.032	1090.64270	-66.0	8.8	-81.5	25.9	17.73959	0.838	-86.2	70.0	37.9	33.4	31.7	57.70262	7-8
9	-10.043	-15.086	1140.34145	-69.3	10.0	-81.7	23.8	18.58070	0.772	-85.8	72.9	34.2	39.6	38.4	87.99192	8-9
10	-9.901	-11.675	1207.56015	-71.9	11.1	-82.0	21.8	19.62071	0.693	-85.4	76.2	30.5	46.4	45.6	101.77092	9-10
11	-12.406	-10.919	1236.85545	-65.8	13.2	-84.6	25.4	20.15274	0.659	-91.0	77.1	30.3	48.9	46.0	79.06392	10-11
12	-15.364	-9.845	1283.35880	-59.6	15.9	-88.4	29.4	20.86552	0.610	-97.2	78.4	30.6	52.6	46.1	94.98701	11-12
13	-15.180	-13.728	1203.64044	-55.9	14.0	-86.5	31.4	19.60284	0.696	-96.5	74.6	34.3	46.0	38.2	113.58492	12-13
14	-15.058	-17.002	1145.89539	-51.3	12.2	-85.2	33.5	18.61071	0.767	-95.9	71.5	38.0	40.2	31.1	95.80214	13-14
15	-12.428	-17.594	1112.11722	-58.4	10.3	-83.1	29.5	18.12058	0.808	-90.8	70.6	37.8	36.2	31.7	81.53430	14-15
16	-10.172	-18.032	1090.64270	-66.0	8.8	-81.5	25.9	17.73959	0.838	-86.2	70.0	37.9	33.4	31.7	69.57338	15-16

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JULY 31, 1964 13 HR 18 MIN 28 SEC 550 MS TAB NO 115 ATLAS PHOTO NO 115 POD SEQUENCE NO 233

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				440.250		967.38919	-6.091	-30.178	2702.844	2.195	-70.625	116.303				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.393	-14.573	1152.53665	-62.5	11.7	-83.8	27.5	18.82174	0.741	-90.9	73.6	34.1	42.2	38.5	0.	1-2
3	-11.173	-16.421	1111.41209	-64.3	10.1	-82.4	26.6	18.13071	0.794	-88.3	71.7	36.0	37.6	35.1	66.07867	2-3
4	-11.095	-13.235	1170.00967	-67.6	11.4	-82.9	24.5	19.08144	0.721	-88.1	74.8	32.2	43.9	42.1	94.72624	3-4
5	-13.744	-12.463	1203.76324	-61.0	13.6	-85.7	28.4	19.63698	0.682	-93.8	75.7	32.3	47.1	42.1	83.42226	4-5
6	-13.683	-15.838	1140.37213	-57.1	11.9	-84.6	30.4	18.59796	0.757	-93.5	72.5	36.0	40.9	34.9	99.32949	5-6
7	-11.173	-16.421	1111.41209	-64.3	10.1	-82.4	26.6	18.13071	0.794	-88.3	71.7	36.0	37.6	35.1	77.94780	6-7
8	-10.180	-18.051	1079.17224	-65.9	8.8	-81.5	25.9	17.55302	0.839	-86.2	70.0	37.9	33.3	31.7	57.07536	7-8
9	-10.052	-15.135	1128.27138	-69.3	10.0	-81.7	23.9	18.38405	0.773	-85.8	72.8	34.2	39.5	38.4	87.02082	8-9
10	-9.914	-11.767	1194.59163	-71.9	11.1	-81.9	21.9	19.41008	0.694	-85.4	76.1	30.5	46.3	45.5	100.56553	9-10
11	-12.390	-11.022	1223.50143	-65.7	13.2	-84.8	25.5	19.93517	0.660	-91.0	77.0	30.4	48.8	45.9	78.18652	10-11
12	-15.315	-9.966	1269.31256	-59.7	15.9	-88.4	29.4	20.63717	0.611	-97.2	78.3	30.6	52.5	45.9	93.86303	11-12
13	-15.135	-13.799	1190.75552	-56.0	14.0	-86.5	31.4	19.39303	0.697	-96.5	74.6	34.3	45.9	38.2	112.14575	12-13
14	-15.014	-17.034	1133.75269	-51.4	12.1	-85.2	33.4	18.41357	0.768	-95.9	71.4	38.0	40.1	31.1	94.70485	13-14
15	-12.413	-17.618	1100.40269	-58.4	10.3	-83.1	29.5	17.92971	0.809	-90.8	70.6	37.8	36.2	31.7	80.64326	14-15
16	-10.180	-18.051	1079.17224	-65.9	8.8	-81.5	25.9	17.55302	0.839	-86.2	70.0	37.9	33.3	31.7	68.83538	15-16

JULY 31, 1964 13 HR 18 MIN 33 SEC 670 MS TAB NO 116 ATLAS PHOTO NO 116 POD SEQUENCE NO 235

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				435.130				956.78311	-6.127	-30.106	2692.238	2.198	-70.574	116.293		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.377	-14.631	1140.18382	-62.5	11.7	-83.8	27.5	18.62001	0.742	-90.9	73.5	34.1	42.1	38.5	0.	1-2
3	-11.171	-16.457	1099.56956	-64.3	10.1	-82.4	26.6	17.93752	0.794	-88.3	71.6	36.0	37.5	35.0	65.32829	2-3
4	-11.093	-13.307	1157.41858	-67.6	11.4	-82.9	24.6	18.87612	0.722	-88.1	74.7	32.2	43.9	42.0	93.63675	3-4
5	-13.714	-12.547	1190.72324	-61.0	13.5	-85.7	28.4	19.42426	0.683	-93.8	75.6	32.3	47.0	42.0	82.48714	4-5
6	-13.654	-15.882	1128.17052	-57.1	11.9	-84.6	30.4	18.39858	0.758	-93.5	72.4	36.0	40.8	34.8	98.16033	5-6
7	-11.171	-16.457	1099.56956	-64.3	10.1	-82.4	26.6	17.93752	0.794	-88.3	71.6	36.0	37.5	35.0	77.09683	6-7
8	-10.188	-18.068	1067.70377	-65.9	8.8	-81.5	25.9	17.36649	0.839	-86.2	70.0	37.9	33.3	31.7	56.45052	7-8
9	-10.062	-15.185	1116.21097	-69.3	10.0	-81.7	23.9	18.18757	0.773	-85.8	72.8	34.2	39.5	38.3	86.05443	8-9
10	-9.926	-11.857	1181.64587	-71.8	11.1	-81.9	21.9	19.19981	0.695	-85.4	76.0	30.5	46.2	45.4	99.36973	9-10
11	-12.374	-11.123	1210.17435	-65.7	13.1	-84.7	25.5	19.71803	0.661	-91.0	76.9	30.4	48.7	45.8	77.31195	10-11
12	-15.266	-10.084	1255.30280	-59.7	15.8	-88.3	29.4	20.40940	0.613	-97.1	78.1	30.6	52.4	45.8	92.74564	11-12
13	-15.089	-13.867	1177.88639	-56.0	13.9	-86.5	31.4	19.18349	0.698	-96.5	74.5	34.3	45.8	38.1	110.72210	12-13
14	-14.970	-17.065	1121.61568	-51.4	12.1	-85.2	33.4	18.21651	0.768	-95.9	71.4	38.0	40.1	31.0	93.61471	13-14
15	-12.397	-17.641	1088.69119	-58.4	10.2	-83.1	29.5	17.73869	0.809	-90.8	70.6	37.8	36.2	31.7	79.75351	14-15
16	-10.188	-18.068	1067.70377	-65.9	8.8	-81.5	25.9	17.36649	0.839	-86.2	70.0	37.9	33.3	31.7	68.09799	15-16

JULY 31, 1964 13 HR 18 MIN 38 SEC 789 MS TAB NO 117 ATLAS PHOTO NO 117 POD SEQUENCE NO 237

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				430.010				946.16452	-6.162	-30.034	2681.620	2.201	-70.523	116.283		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.362	-14.688	1127.81374	-62.5	11.7	-83.8	27.5	18.41799	0.743	-90.9	73.5	34.1	42.0	38.4	0.	1-2
3	-11.169	-16.493	1087.70882	-64.3	10.1	-82.4	26.6	17.74404	0.794	-88.3	71.6	36.0	37.5	35.0	64.57802	2-3
4	-11.092	-13.380	1144.81114	-67.5	11.3	-82.9	24.6	18.67053	0.723	-88.1	74.6	32.2	43.8	41.9	92.54764	3-4
5	-13.683	-12.631	1177.66846	-61.0	13.5	-85.7	28.4	19.21130	0.684	-93.8	75.6	32.3	46.9	41.9	81.55197	4-5
6	-13.624	-15.925	1115.95125	-57.2	11.9	-84.6	30.4	18.19972	0.758	-93.5	72.4	36.0	40.8	34.8	96.99233	5-6
7	-11.169	-16.493	1087.70882	-64.3	10.1	-82.4	26.6	17.74404	0.794	-88.3	71.6	36.0	37.5	35.0	76.24502	6-7
8	-10.197	-18.086	1056.21698	-65.9	8.8	-81.5	25.9	17.17966	0.839	-86.2	70.0	37.9	33.3	31.6	55.82498	7-8
9	-10.072	-15.236	1104.13297	-69.2	9.9	-81.7	23.9	17.99079	0.774	-85.8	72.7	34.2	39.4	38.2	85.08754	8-9
10	-9.937	-11.947	1168.68570	-71.8	11.0	-81.9	22.0	18.98930	0.696	-85.4	76.0	30.5	46.1	45.3	98.17541	9-10
11	-12.358	-11.223	1196.83424	-65.7	13.1	-84.7	25.5	15.50068	0.663	-91.0	76.8	30.4	48.6	45.7	76.43731	10-11
12	-15.217	-10.202	1241.28453	-59.7	15.7	-88.3	29.4	20.18150	0.615	-97.1	78.0	30.6	52.2	45.7	91.63013	11-12
13	-15.043	-13.736	1165.00299	-56.0	13.9	-86.5	31.4	18.97370	0.699	-96.5	74.4	34.3	45.7	38.0	109.30319	12-13
14	-14.926	-17.096	1109.46123	-51.4	12.0	-85.2	33.4	18.01918	0.769	-95.9	71.4	38.0	40.0	31.0	92.52498	13-14
15	-12.382	-17.664	1076.96135	-58.4	10.2	-83.1	29.5	17.54778	0.809	-90.8	70.6	37.8	36.1	31.6	78.86324	14-15
16	-10.197	-18.086	1056.21698	-65.9	8.8	-81.5	25.9	17.17966	0.839	-86.2	70.0	37.9	33.3	31.6	67.35932	15-16

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JULY 31, 1964 13 HR 18 MIN 43 SEC 909 MS TAB NO 118 ATLAS PHOTO NO 118 POD SEQUENCE NO 239

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				424.890		935.53369	-6.198	-29.961	2670.989	2.204	-70.472	116.273				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.346	-14.746	1115.42461	-62.5	11.6	-83.8	27.5	18.21567	0.743	-90.9	73.4	34.1	42.0	38.4	0.	1-2
3	-11.166	-16.529	1075.82845	-64.2	10.1	-82.4	26.6	17.55023	0.795	-88.3	71.6	36.0	37.4	35.0	63.82747	2-3
4	-11.090	-13.453	1132.18542	-67.5	11.3	-82.9	24.6	18.46463	0.724	-88.1	74.6	32.2	43.7	41.8	91.45845	3-4
5	-13.652	-12.714	1164.59674	-61.0	13.5	-85.6	28.4	18.99807	0.685	-93.8	75.5	32.3	46.8	41.9	80.61629	4-5
6	-13.595	-15.969	1103.71281	-57.2	11.9	-84.6	30.4	18.00015	0.759	-93.5	72.3	36.0	40.7	34.7	95.82498	5-6
7	-11.166	-16.529	1075.82845	-64.2	10.1	-82.4	26.6	17.55023	0.795	-88.3	71.6	36.0	37.4	35.0	75.39243	6-7
8	-10.205	-18.105	1044.71072	-65.9	8.8	-81.5	25.9	16.99251	0.839	-86.2	69.9	37.9	33.3	31.6	55.19873	7-8
9	-10.082	-15.286	1092.03571	-69.2	9.9	-81.7	24.0	17.79370	0.774	-85.8	72.7	34.2	37.4	38.2	64.11575	8-9
10	-9.949	-12.030	1155.70882	-71.8	11.0	-81.9	22.0	18.77852	0.697	-85.4	75.9	30.5	46.0	45.2	96.98205	9-10
11	-12.343	-11.324	1183.47861	-65.7	13.1	-84.7	25.5	19.28308	0.664	-91.0	76.7	30.4	48.5	45.6	75.56224	10-11
12	-15.167	-10.321	1227.25500	-59.7	15.7	-88.2	29.3	19.95341	0.617	-97.1	77.9	30.6	52.1	45.2	90.51618	11-12
13	-14.997	-14.005	1152.10167	-56.0	13.8	-86.5	31.3	18.76362	0.700	-96.5	74.3	34.3	45.7	37.9	107.88818	12-13
14	-14.882	-17.127	1097.28793	-51.5	12.0	-85.2	33.3	17.82153	0.769	-95.9	71.3	38.1	40.0	31.0	91.43533	13-14
15	-12.366	-17.688	1065.21188	-58.4	10.2	-83.1	29.5	17.35634	0.810	-90.8	70.5	37.8	36.1	31.6	77.97211	14-15
16	-10.205	-18.105	1044.71072	-65.9	8.8	-81.5	25.9	16.99251	0.839	-86.2	69.9	37.9	33.3	31.6	66.61972	15-16

JULY 31, 1964 13 HR 18 MIN 49 SEC 29 MS TAB NO 119 ATLAS PHOTO NO 119 POD SEQUENCE NO 241

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				419.770		924.88998	-6.234	-29.888	2660.345	2.208	-70.420	116.263				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.331	-14.805	1102.98836	-62.5	11.6	-83.8	27.5	18.01258	0.744	-90.9	73.3	34.1	41.9	38.3	0.	1-2
3	-11.164	-16.567	1063.90488	-64.2	10.1	-82.4	26.6	17.35572	0.795	-88.3	71.5	36.0	37.4	34.9	63.07294	2-3
4	-11.089	-13.527	1119.50977	-67.5	11.3	-82.9	24.7	18.25793	0.724	-88.1	74.5	32.3	43.6	41.7	90.36284	3-4
5	-13.622	-12.800	1151.47412	-61.0	13.4	-85.6	28.4	18.78470	0.688	-93.8	75.4	32.3	46.7	41.8	79.67736	4-5
6	-13.565	-16.015	1091.43018	-57.2	11.8	-84.6	30.4	17.79965	0.760	-93.5	72.3	36.0	40.6	34.7	94.65116	5-6
7	-11.164	-16.567	1063.90488	-64.2	10.1	-82.4	26.6	17.35572	0.795	-88.3	71.5	36.0	37.4	34.9	74.53666	6-7
8	-10.214	-18.124	1033.16493	-65.9	8.8	-81.4	26.0	16.80472	0.839	-86.2	69.9	37.9	33.3	31.6	54.56894	7-8
9	-10.091	-15.338	1074.89255	-69.2	9.9	-81.6	24.0	17.59587	0.775	-85.8	72.6	34.2	39.3	38.1	83.14610	8-9
10	-9.959	-12.130	1142.67924	-71.7	11.0	-81.9	22.1	18.56689	0.698	-85.4	75.8	30.5	45.9	45.1	95.78204	9-10
11	-12.327	-11.427	1170.06915	-65.7	13.0	-84.6	25.5	19.06461	0.665	-91.0	76.6	30.4	48.4	45.5	74.68388	10-11
12	-15.118	-10.441	1213.17180	-59.7	15.6	-88.2	29.3	19.72445	0.619	-97.1	77.8	30.6	52.0	45.4	89.39933	11-12
13	-14.951	-14.076	1139.15253	-56.0	13.8	-86.4	31.3	18.55276	0.702	-96.5	74.3	34.3	45.6	37.9	106.46710	12-13
14	-14.838	-17.160	1095.07344	-51.5	12.0	-85.2	33.3	17.62322	0.770	-95.9	71.3	38.1	39.9	30.9	90.33953	13-14
15	-12.351	-17.712	1053.42189	-58.5	10.2	-83.1	29.5	17.16424	0.810	-90.8	70.5	37.8	36.1	31.6	77.07835	14-15
16	-10.214	-18.124	1033.16493	-65.9	8.8	-81.4	26.0	16.80472	0.839	-86.2	69.9	37.9	33.3	31.6	65.87748	15-16

JULY 31, 1964 13 HR 18 MIN 54 SEC 149 MS TAB NO 120 ATLAS PHOTO NO 120 POD SEQUENCE NO 243

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				414.650		914.23383	-6.270	-29.814	2649.689	2.211	-70.367	116.253				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.315	-14.865	1090.53186	-62.5	11.6	-83.8	27.5	17.80919	0.745	-90.9	73.3	34.1	41.8	38.2	0.	1-2
3	-11.162	-16.605	1051.96225	-64.2	10.1	-82.4	26.6	17.16090	0.796	-88.3	71.5	36.0	37.4	34.9	62.31822	2-3
4	-11.087	-13.602	1106.81662	-67.5	11.3	-82.8	24.7	18.05094	0.725	-88.1	74.4	32.3	43.6	41.7	89.26749	3-4
5	-13.591	-12.886	1138.33571	-61.0	13.4	-85.6	28.4	18.56967	0.687	-93.8	75.3	32.3	46.6	41.7	78.73808	4-5
6	-13.536	-16.060	1079.12900	-57.2	11.8	-84.6	30.3	17.59925	0.760	-93.5	72.2	36.1	40.6	34.6	93.47842	5-6
7	-11.162	-16.605	1051.96225	-64.2	10.1	-82.4	26.6	17.16090	0.796	-88.3	71.5	36.0	37.4	34.9	73.68005	6-7
8	-10.222	-18.144	1021.60008	-65.8	8.8	-81.4	26.0	16.61662	0.840	-86.2	69.9	37.9	33.2	31.6	53.93851	7-8
9	-10.101	-15.391	1067.73087	-69.2	9.9	-81.6	24.0	17.39773	0.775	-85.8	72.6	34.2	39.3	38.1	82.17184	8-9
10	-9.971	-12.222	1129.63422	-71.7	11.0	-81.8	22.1	18.35500	0.700	-85.4	75.7	30.5	45.8	45.0	94.58334	9-10
11	-12.311	-11.530	1156.64549	-65.7	13.0	-84.6	25.6	18.84590	0.667	-91.0	76.5	30.4	48.3	45.4	73.80515	10-11
12	-15.069	-10.561	1199.07881	-59.7	15.5	-88.1	29.3	19.49533	0.620	-97.1	77.7	30.7	51.8	45.3	88.28445	11-12
13	-14.909	-14.147	1126.18701	-56.0	13.7	-86.4	31.3	18.34164	0.703	-96.5	74.2	34.4	45.5	37.8	105.05043	12-13
14	-14.794	-17.193	1072.84067	-51.5	11.9	-85.2	33.3	17.42461	0.771	-95.9	71.3	38.1	39.9	30.9	89.24404	13-14
15	-12.335	-17.737	1041.61273	-58.5	10.2	-83.1	29.5	16.97183	0.811	-90.8	70.5	37.8	36.0	31.5	76.18387	14-15
16	-10.222	-18.144	1021.60008	-65.8	8.8	-81.4	26.0	16.61662	0.840	-86.2	69.9	37.9	33.2	31.6	65.13406	15-16

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JULY 31, 1964 13 HR 18 MIN 59 SEC 269 MS

TAB NO 121

ATLAS PHOTO NO 121

POD SEQUENCE NO 245

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				409.530		903.56464	-6.306	-29.740	2639.020	2.215	-70.315	116.243				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.300	-14.925	1078.05765	-62.5	11.6	-83.8	27.5	17.60544	0.746	-90.9	73.2	34.1	41.8	38.2	0.	1-2
3	-11.160	-16.643	1039.99753	-64.2	10.0	-82.4	26.7	16.96572	0.796	-88.3	71.4	36.0	37.3	34.8	61.56300	2-3
4	-11.086	-13.677	1094.10271	-67.4	11.3	-82.8	24.7	17.84361	0.726	-88.1	74.3	32.3	43.5	41.6	88.17174	3-4
5	-13.560	-12.972	1125.17732	-61.0	13.3	-85.5	28.4	18.35502	0.689	-93.8	75.2	32.3	46.5	41.6	77.79832	4-5
6	-13.506	-16.106	1066.80605	-57.2	11.8	-84.5	30.3	17.99829	0.761	-93.5	72.2	36.1	40.5	34.6	92.30587	5-6
7	-11.160	-16.643	1039.99753	-64.2	10.0	-82.4	26.7	16.96572	0.796	-88.3	71.4	36.0	37.3	34.8	72.82224	6-7
8	-10.230	-18.164	1010.01347	-65.8	8.8	-81.4	26.0	16.42816	0.840	-86.2	69.9	37.9	33.2	31.5	53.30718	7-8
9	-10.111	-15.443	1055.54742	-69.1	9.9	-81.6	24.1	17.19924	0.776	-85.8	72.5	34.2	39.2	38.0	81.19643	8-9
10	-9.982	-12.315	1116.56947	-71.7	11.0	-81.8	22.2	18.14280	0.701	-85.4	75.6	30.5	45.7	44.9	93.38517	9-10
11	-12.295	-11.633	1143.20316	-65.7	13.0	-84.6	25.6	18.62688	0.668	-91.0	76.4	30.4	48.2	45.3	72.92583	10-11
12	-15.020	-10.681	1184.97098	-59.7	15.5	-88.0	29.3	19.26597	0.622	-97.1	77.5	30.7	51.7	45.1	87.17054	11-12
13	-14.859	-14.218	1113.20125	-56.0	13.7	-86.4	31.2	18.13019	0.704	-96.5	74.1	34.4	45.4	37.7	103.63702	12-13
14	-14.750	-17.226	1060.58635	-51.6	11.9	-85.2	33.2	17.22565	0.771	-95.9	71.2	38.1	39.8	30.9	88.14827	13-14
15	-12.319	-17.763	1029.78160	-58.5	10.2	-83.1	29.5	16.77906	0.811	-90.8	70.5	37.9	36.0	31.5	75.28843	14-15
16	-10.230	-18.164	1010.01347	-65.8	8.8	-81.4	26.0	16.42816	0.840	-86.2	69.9	37.9	33.2	31.5	64.38940	15-16

JULY 31, 1964 13 HR 19 MIN 4 SEC 389 MS

TAB NO 122

ATLAS PHOTO NO 122

POD SEQUENCE NO 247

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				404.410		892.88293	-6.343	-29.664	2628.338	2.218	-70.262	116.232				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.284	-14.986	1065.53532	-62.5	11.5	-83.7	27.5	17.40094	0.747	-90.9	73.2	34.1	41.7	38.1	0.	1-2
3	-11.157	-16.683	1027.99052	-64.2	10.0	-82.4	26.7	16.76985	0.797	-88.3	71.4	36.0	37.3	34.8	60.80398	2-3
4	-11.084	-13.754	1081.34038	-67.4	11.3	-82.8	24.8	17.63548	0.727	-88.1	74.3	32.3	43.4	41.5	87.07011	3-4
5	-13.527	-13.060	1111.96930	-61.0	13.3	-85.5	28.4	18.13956	0.690	-93.8	75.1	32.3	46.4	41.5	76.85490	4-5
6	-13.476	-16.154	1054.43935	-57.2	11.7	-84.5	30.3	17.19662	0.762	-93.5	72.1	36.1	40.5	34.5	91.12745	5-6
7	-11.157	-16.683	1027.99052	-64.2	10.0	-82.4	26.7	16.76985	0.797	-88.3	71.4	36.0	37.3	34.8	71.96156	6-7
8	-10.238	-18.186	998.38811	-65.8	8.8	-81.4	26.0	16.23908	0.840	-86.2	69.9	37.9	33.2	31.5	52.67236	7-8
9	-10.120	-15.458	1043.31949	-69.1	9.9	-81.6	24.1	17.00002	0.777	-85.8	72.5	34.2	39.2	38.0	80.21562	8-9
10	-9.993	-12.410	1103.45451	-71.6	11.0	-81.8	22.2	17.92978	0.702	-85.4	75.5	30.5	45.6	44.8	92.18116	9-10
11	-12.278	-11.738	1129.70900	-65.6	12.9	-84.5	25.6	18.40703	0.670	-91.0	76.3	30.4	48.1	45.2	72.04307	10-11
12	-14.970	-10.863	1170.81107	-59.7	15.4	-88.0	29.3	19.03577	0.624	-97.1	77.4	30.7	51.6	45.0	86.05374	11-12
13	-14.813	-14.291	1100.16824	-56.1	13.6	-86.4	31.2	17.91796	0.705	-96.5	74.1	34.4	45.3	37.6	102.21837	12-13
14	-14.705	-17.261	1048.29112	-51.6	11.8	-85.2	33.2	17.02602	0.772	-95.9	71.2	38.1	39.8	30.8	87.04675	13-14
15	-12.303	-17.789	1017.91030	-58.5	10.1	-83.1	29.4	16.58564	0.811	-90.8	70.4	37.9	35.9	31.5	74.39016	14-15
16	-10.238	-18.186	998.38811	-65.8	8.8	-81.4	26.0	16.23908	0.840	-86.2	69.9	37.9	33.2	31.5	63.64201	15-16

JULY 31, 1964 13 HR 19 MIN 9 SEC 509 MS

TAB NO 123

ATLAS PHOTO NO 123

POD SEQUENCE NO 249

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				399.291			882.18814	-6.380	-29.589	2617.643	2.221	-70.208	116.222			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.268	-15.048	1052.99471	-62.5	11.5	-83.7	27.5	17.19615	0.747	-90.9	73.1	35.1	41.6	38.0	0.	1-2
3	-11.155	-16.723	1015.96420	-64.2	10.0	-82.4	26.7	16.57366	0.797	-88.3	71.4	36.0	37.2	34.7	60.04487	2-3
4	-11.082	-13.831	1068.56076	-67.4	11.3	-82.8	24.8	17.42708	0.728	-88.1	74.2	32.3	43.3	41.4	85.96894	3-4
5	-13.498	-13.148	1098.74559	-61.0	13.2	-85.5	28.4	17.92385	0.691	-93.8	75.0	32.3	46.3	41.4	75.91142	4-5
6	-13.446	-16.202	1042.05392	-57.2	11.7	-84.5	30.3	16.99465	0.762	-93.5	72.1	36.1	40.4	34.5	89.95026	5-6
7	-11.155	-16.723	1015.96420	-64.2	10.0	-82.4	26.7	16.57366	0.797	-88.3	71.4	36.0	37.2	34.7	71.09977	6-7
8	-10.247	-18.207	986.74332	-65.8	8.8	-81.4	26.0	16.04968	0.840	-86.2	69.8	38.0	33.2	31.5	52.03696	7-8
9	-10.130	-15.552	1031.07291	-69.1	9.9	-81.6	24.1	16.80050	0.777	-85.8	72.4	34.2	39.1	37.9	79.23429	8-9
10	-10.004	-12.504	1090.32425	-71.6	11.0	-81.8	22.3	17.71650	0.703	-85.4	75.4	30.5	45.5	44.7	90.97862	9-10
11	-12.262	-11.843	1116.20097	-65.6	12.9	-84.5	25.6	18.18694	0.671	-91.0	76.2	30.4	48.0	45.1	71.16016	10-11
12	-14.920	-10.925	1156.64180	-59.7	15.3	-87.9	29.3	18.80541	0.626	-97.1	77.3	30.7	51.4	44.9	84.93875	11-12
13	-14.766	-14.364	1087.11890	-56.1	13.6	-86.4	31.2	17.70547	0.706	-96.4	74.0	34.4	45.2	37.5	100.80437	12-13
14	-14.660	-17.296	1035.97176	-51.6	11.8	-85.2	33.1	16.82609	0.773	-95.9	71.2	38.1	39.7	30.8	85.94573	13-14
15	-12.287	-17.816	1006.01950	-58.5	10.1	-83.1	29.4	16.39190	0.812	-90.8	70.4	37.9	35.9	31.4	73.49111	14-15
16	-10.247	-18.207	986.74332	-65.8	8.8	-81.4	26.0	16.04968	0.840	-86.2	69.8	38.0	33.2	31.5	62.89351	15-16

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JULY 31, 1964 13 HR 19 MIN 14 SEC 629 MS TAB NO 124 ATLAS PHOTO NO 124 POD SEQUENCE NO 251

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				394.171			871.48044	-6.418	-29.512	2606.936	2.225	-70.154	116.211			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.252	-15.109	1040.43826	-62.5	11.5	-83.7	27.5	16.99109	0.748	-90.9	73.0	34.1	41.6	38.0	0.	1-2
3	-11.152	-16.763	1003.92067	-64.2	10.0	-82.4	26.7	16.37719	0.798	-88.3	71.3	36.0	37.2	34.7	59.28612	2-3
4	-11.080	-13.908	1055.76668	-67.4	11.2	-82.8	24.8	17.21844	0.729	-86.1	74.1	32.3	43.2	41.3	84.86672	3-4
5	-13.466	-13.236	1085.50926	-61.0	13.2	-85.5	28.4	17.70793	0.692	-93.8	75.0	32.3	46.2	41.3	74.96796	4-5
6	-13.416	-16.249	1029.65208	-57.2	11.7	-84.5	30.3	16.79241	0.763	-93.5	72.0	36.1	40.3	34.4	88.77487	5-6
7	-11.152	-16.763	1003.92067	-64.2	10.0	-82.4	26.7	16.37719	0.798	-88.3	71.3	36.0	37.2	34.7	70.23747	6-7
8	-10.255	-18.229	975.08087	-65.7	8.8	-81.4	26.1	15.85999	0.841	-86.2	69.8	38.0	33.2	31.5	51.40116	7-8
9	-10.140	-15.607	1018.81004	-69.0	9.9	-81.6	24.2	16.60071	0.778	-85.8	72.4	34.2	39.0	37.8	78.25283	8-9
10	-10.015	-12.599	1077.18179	-71.4	11.0	-81.0	22.3	17.50303	0.704	-85.4	75.3	30.5	45.4	44.6	89.77828	9-10
11	-12.246	-11.948	1102.68239	-65.6	12.9	-84.5	25.7	17.96668	0.672	-91.0	76.1	30.4	47.9	44.9	70.27705	10-11
12	-14.871	-11.046	1142.46681	-59.7	15.3	-87.9	29.3	18.57496	0.628	-97.1	77.2	30.7	51.3	44.7	83.82603	11-12
13	-14.720	-14.437	1074.05583	-56.1	13.5	-86.3	31.2	17.49276	0.707	-96.4	73.9	34.4	45.1	37.4	99.39577	12-13
14	-14.615	-17.330	1023.64667	-51.7	11.8	-85.2	33.1	16.62569	0.773	-95.9	71.1	38.1	39.6	30.7	84.84576	13-14
15	-12.271	-17.843	994.11110	-58.5	10.1	-83.1	29.4	16.19787	0.812	-90.8	70.4	37.9	35.9	31.4	72.59156	14-15
16	-10.255	-18.229	975.08087	-65.7	8.8	-81.4	26.1	15.85999	0.841	-86.2	69.8	38.0	33.2	31.5	62.14395	15-16

JULY 31, 1964 13 HR 19 MIN 19 SEC 749 MS TAB NO 125 ATLAS PHOTO NO 125 POD SEQUENCE NO 253

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ					
				389.051		860.75949	-6.455	-29.435	2596.215	2.228	-70.100	116.201					
PHOTO DATA				AZS/C		AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.236	-15.171	1027.87468	-62.5	11.5	-83.7	27.5	16.78592	0.749	-90.9	73.0	34.1	41.5	37.9	0.	1-2	
3	-11.149	-16.802	991.86713	-64.2	10.0	-82.4	26.7	16.18056	0.798	-88.3	71.3	36.0	37.1	34.6	58.52890	2-3	
4	-11.078	-13.985	1042.96780	-67.4	11.2	-82.7	24.9	17.00973	0.730	-88.1	74.0	32.3	43.2	41.2	83.77142	3-4	
5	-13.435	-13.323	1072.27074	-61.0	13.2	-85.4	28.4	17.49197	0.694	-93.8	74.9	32.4	46.1	41.2	74.02526	4-5	
6	-13.386	-16.296	1017.24146	-57.3	11.6	-84.5	30.2	16.59002	0.764	-93.5	72.0	36.1	40.3	34.4	87.60353	5-6	
7	-11.149	-16.802	991.86713	-64.2	10.0	-82.4	26.7	16.18056	0.798	-88.3	71.3	36.0	37.1	34.6	69.37492	6-7	
8	-10.263	-18.250	963.40679	-65.7	8.8	-81.4	26.1	15.67011	0.841	-86.2	69.8	38.0	33.1	31.4	50.76596	7-8	
9	-10.149	-15.661	1006.53901	-69.0	9.9	-81.6	24.2	16.40079	0.779	-85.8	72.3	34.2	39.0	37.8	77.27284	8-9	
10	-10.026	-12.693	1064.03822	-71.5	11.0	-81.7	22.4	17.28953	0.706	-85.4	75.2	30.5	45.3	44.5	88.58250	9-10	
11	-12.229	-12.052	1089.16508	-65.6	12.8	-84.4	25.7	17.74645	0.674	-91.0	76.0	30.4	47.7	44.8	69.39507	10-11	
12	-14.821	-11.167	1128.29909	-59.7	15.2	-87.8	29.3	18.34462	0.630	-97.1	77.1	30.7	51.2	44.6	82.71634	11-12	
13	-14.673	-14.509	1060.98853	-56.1	13.4	-86.3	31.1	17.27958	0.708	-96.4	73.8	34.4	45.0	37.4	97.99560	12-13	
14	-14.570	-17.365	1011.30636	-51.7	11.7	-85.2	33.0	16.42553	0.774	-95.9	71.1	38.1	39.6	30.7	83.74868	13-14	
15	-12.255	-17.869	982.19144	-58.5	10.1	-83.1	29.4	16.00366	0.812	-90.8	70.4	37.9	35.8	31.4	71.69211	14-15	
16	-10.263	-18.250	963.40679	-65.7	8.8	-81.4	26.1	15.67011	0.841	-86.2	69.8	38.0	33.1	31.4	61.39401	15-16	

JULY 31, 1964 13 HR 19 MIN 24 SEC 869 MS TAB NO 126 ATLAS PHOTO NO 126 POD SEQUENCE NO 255

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				383.931		850.02570		-6.493		-29.358		2585.481		2.232		-70.045		116.190	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-12.219	-15.232	1015.29261	-62.5	11.4	-83.7	27.5	16.58044	0.750	-90.9	72.9	34.2	41.5	37.8	0.	1-2			
3	-11.146	-16.842	979.79417	-64.1	10.0	-82.4	26.7	15.98362	0.799	-88.3	71.3	36.0	37.1	34.6	57.77164	2-3			
4	-11.076	-14.061	1030.15147	-67.3	11.2	-82.7	24.9	16.80072	0.731	-86.1	74.0	32.3	43.1	41.2	82.67449	3-4			
5	-13.404	-13.411	1059.01639	-61.0	13.1	-85.4	28.4	17.27575	0.695	-93.8	74.8	32.4	46.0	41.1	73.08248	4-5			
6	-13.355	-16.344	1004.81205	-57.3	11.6	-84.5	30.2	16.38733	0.764	-93.5	71.9	36.1	40.2	34.3	86.43335	5-6			
7	-11.146	-16.842	979.79417	-64.1	10.0	-82.4	26.7	15.98362	0.799	-88.3	71.3	36.0	37.1	34.6	68.51164	6-7			
8	-10.271	-18.271	951.71317	-65.7	8.8	-81.4	26.1	15.47992	0.841	-86.2	69.8	38.0	33.1	31.4	50.13015	7-8			
9	-10.158	-15.715	994.26318	-69.0	9.9	-81.6	24.3	16.20056	0.775	-85.8	72.3	34.3	38.9	37.7	76.29229	8-9			
10	-10.037	-12.787	1050.87904	-71.5	11.0	-81.7	22.4	17.07578	0.707	-85.4	75.1	30.5	45.2	44.4	87.38809	9-10			
11	-12.211	-12.157	1075.63350	-65.6	12.8	-84.4	25.7	17.52598	0.675	-91.0	75.9	30.4	47.6	44.7	68.51269	10-11			
12	-14.771	-11.288	1114.12144	-59.7	15.1	-87.8	29.3	18.11413	0.632	-97.1	76.9	30.7	51.0	44.5	81.60845	11-12			
13	-14.626	-14.581	1047.90465	-56.1	13.4	-86.3	31.1	17.06692	0.709	-96.4	73.8	34.4	44.9	37.3	96.59971	12-13			
14	-14.520	-17.399	998.94777	-51.7	11.7	-85.2	33.0	16.22486	0.775	-95.9	71.0	38.1	39.5	30.7	82.65209	13-14			
15	-12.239	-17.896	970.25222	-58.5	10.1	-83.1	29.4	15.80913	0.813	-90.8	70.3	37.9	35.8	31.3	70.79201	14-15			
16	-10.271	-18.271	951.71317	-65.7	8.8	-81.4	26.1	15.47992	0.841	-86.2	69.8	38.0	33.1	31.4	60.64279	15-16			

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JULY 31, 1964 13 HR 19 MIN 29 SEC 988 MS

TAB NO 127

ATLAS PHOTO NO 127

POD SEQUENCE NO 257

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
PHOTO DATA				378.811	839.27832	-6.532	-29.279	2574.734	2.235	-69.990	116.179			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-12.203	-15.293	1002.70003	-62.5	11.4	-83.7	27.5	16.37480	0.751	-90.9	72.9	34.2	41.4	37.7
3	-11.143	-16.881	967.70859	-64.1	10.0	-82.4	26.7	15.78646	0.799	-88.3	71.2	36.0	37.0	34.6
4	-11.074	-14.138	1017.32758	-67.3	11.2	-82.7	24.9	16.59160	0.732	-88.1	73.9	32.3	43.0	41.1
5	-13.372	-13.497	1045.75551	-61.0	13.1	-85.4	28.4	17.05943	0.696	-93.8	74.7	32.4	45.9	41.0
6	-13.324	-16.390	992.37000	-57.3	11.6	-84.5	30.2	16.18443	0.765	-93.4	71.9	36.1	40.2	34.3
7	-11.143	-16.881	967.70859	-64.1	10.0	-82.4	26.7	15.78646	0.799	-88.3	71.2	36.0	37.0	34.6
8	-10.278	-18.292	940.00584	-65.7	8.8	-81.4	26.1	15.28950	0.841	-86.2	69.8	38.0	33.1	31.4
9	-10.167	-15.768	981.94905	-68.9	9.9	-81.5	24.3	16.00016	0.780	-85.8	72.2	34.3	38.9	37.7
10	-10.047	-12.880	1037.71642	-71.5	11.0	-81.7	22.5	16.86197	0.708	-85.4	75.1	30.5	45.1	44.3
11	-12.196	-12.260	1062.09944	-65.6	12.8	-84.4	25.7	17.30547	0.677	-91.0	75.8	30.4	47.5	44.6
12	-14.721	-11.407	1099.94537	-59.7	15.1	-87.7	29.3	17.88365	0.633	-97.1	76.8	30.7	50.9	44.3
13	-14.579	-14.653	1034.81158	-56.1	13.3	-86.3	31.1	16.85371	0.711	-96.4	73.7	34.4	46.8	37.2
14	-14.480	-17.433	986.57491	-51.8	11.7	-95.2	32.9	16.02396	0.775	-95.9	71.0	38.1	39.5	30.6
15	-12.222	-17.922	958.29865	-58.5	10.0	-83.1	29.4	15.61437	0.813	-90.8	70.3	37.9	35.8	31.3
16	-10.278	-18.292	940.00584	-65.7	8.8	-81.4	26.1	15.28950	0.841	-86.2	69.8	38.0	33.1	31.4

JULY 31, 1964 13 HR 19 MIN 35 SEC 108 MS

TAB NO 128

ATLAS PHOTO NO 128

POD SEQUENCE NO 259

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
PHOTO DATA				373.691	828.51773	-6.570	-29.200	2563.973	2.239	-69.935	116.168			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-12.185	-15.352	990.11731	-62.5	11.4	-83.7	27.5	16.16931	0.751	-90.9	72.8	34.2	41.3	37.7
3	-11.139	-16.919	955.62811	-64.1	10.0	-82.3	26.7	15.58939	0.799	-88.3	71.2	36.0	37.0	34.5
4	-11.070	-14.212	1004.52087	-67.3	11.2	-82.7	24.9	16.38275	0.733	-88.1	73.8	32.3	42.9	41.0
5	-13.339	-13.582	1032.51202	-61.0	13.0	-85.4	28.4	16.84339	0.697	-93.8	74.6	32.4	45.9	40.9
6	-13.293	-16.435	979.93175	-57.3	11.5	-84.5	30.2	15.96159	0.766	-93.4	71.8	36.1	40.1	34.2
7	-11.139	-16.919	955.62811	-64.1	10.0	-82.3	26.7	15.58939	0.799	-88.3	71.2	36.0	37.0	34.5
8	-10.285	-18.312	928.30031	-65.7	8.8	-81.4	26.1	15.09911	0.841	-86.2	69.7	38.0	33.1	31.4
9	-10.175	-15.820	969.66009	-68.9	9.9	-81.5	24.3	15.79994	0.780	-85.8	72.2	34.3	38.8	37.6
10	-10.057	-12.972	1024.57990	-71.4	11.0	-81.7	22.5	16.64859	0.709	-85.4	75.0	30.5	45.1	44.2
11	-12.178	-12.362	1048.59174	-65.6	12.7	-84.3	25.7	17.08539	0.678	-91.0	75.7	30.4	47.4	44.5
12	-14.670	-11.525	1085.79926	-59.7	15.0	-87.7	29.2	17.65367	0.635	-97.1	76.7	30.7	50.8	44.2
13	-14.530	-14.723	1021.72869	-56.2	13.3	-86.3	31.1	16.64067	0.712	-96.4	73.6	34.4	46.8	37.1
14	-14.433	-17.465	974.20076	-51.8	11.6	-95.2	32.9	15.82304	0.776	-95.9	71.0	38.1	39.4	30.6
15	-12.204	-17.947	946.34488	-58.5	10.0	-83.1	29.4	15.41960	0.814	-90.8	70.3	37.9	35.7	31.3
16	-10.285	-18.312	928.30031	-65.7	8.8	-81.4	26.1	15.09911	0.841	-86.2	69.7	38.0	33.1	31.4

JULY 31, 1964 13 HR 19 MIN 40 SEC 228 MS

TAB NO 129

ATLAS PHOTO NO 129

POD SEQUENCE NO 261

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
PHOTO DATA				368.571	817.74387	-6.609	-29.120	2553.199	2.243	-69.879	116.156			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-12.168	-15.411	977.51414	-62.5	11.4	-83.7	27.5	15.96350	0.752	-90.9	72.7	34.2	41.2	37.6
3	-11.135	-16.957	943.52643	-64.1	9.9	-82.3	26.8	15.39198	0.800	-88.3	71.1	36.1	37.0	34.5
4	-11.067	-14.286	991.69437	-67.3	11.1	-82.7	25.0	16.17358	0.734	-88.1	73.8	32.3	42.8	40.9
5	-13.306	-13.667	1019.25031	-61.0	13.0	-85.3	28.4	16.62706	0.698	-93.8	74.5	32.4	45.8	40.8
6	-13.261	-16.481	967.47298	-57.3	11.5	-84.5	30.2	15.77842	0.766	-93.4	71.8	36.1	40.0	34.2
7	-11.135	-16.957	943.52643	-64.1	9.9	-82.3	26.8	15.39198	0.800	-88.3	71.1	36.1	37.0	34.5
8	-10.292	-18.331	916.57365	-65.7	8.8	-81.4	26.2	14.90837	0.842	-86.2	69.7	38.0	33.0	31.3
9	-10.184	-15.873	957.35033	-68.9	9.9	-81.5	24.4	15.59938	0.781	-85.8	72.1	34.3	38.8	37.6
10	-10.066	-13.063	1011.42513	-71.4	10.9	-81.7	22.6	16.43490	0.710	-85.4	74.9	30.5	45.0	44.1
11	-12.160	-12.463	1035.06703	-65.5	12.7	-84.3	25.8	16.86503	0.679	-91.0	75.6	30.4	47.3	44.4
12	-14.618	-11.642	1071.64023	-59.7	14.9	-87.6	29.2	17.42347	0.637	-97.1	76.6	30.7	50.6	44.1
13	-14.482	-14.793	1008.62724	-56.2	13.2	-86.2	31.0	16.42732	0.713	-96.4	73.5	34.4	44.7	37.1
14	-14.387	-17.498	961.60853	-51.8	11.6	-95.2	32.8	15.62179	0.777	-95.9	70.9	38.1	39.3	30.6
15	-12.187	-17.971	934.37006	-58.6	10.0	-83.1	29.3	15.22449	0.814	-90.8	70.3	37.9	35.7	31.3
16	-10.292	-18.331	916.57365	-65.7	8.8	-81.4	26.2	14.90837	0.842	-86.2	69.7	38.0	33.0	31.3

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JULY 31, 1964 13 HR 19 MIN 45 SEC 348 MS TAB NO 130 ATLAS PHOTO NO 130 POD SEQUENCE NO 263

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				363.451	806.95612	-6.648	-29.040	2542.411	2.246	-69.822	116.145		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.150	-15.470	964.90662	-62.5	11.3	-83.6	27.5	15.75761	0.753	-90.9	72.7 34.2 41.2	37.6	0.
3	-11.131	-16.994	931.41698	-64.1	9.9	-82.3	26.8	15.19443	0.800	-88.3	71.1 36.1 36.9	34.4	54.75734
4	-11.064	-14.360	978.86593	-67.3	11.1	-82.7	25.0	15.96437	0.735	-88.1	73.7 32.3 42.8	40.9	78.32465
5	-13.273	-13.751	1005.98991	-61.0	12.9	-85.3	28.3	16.44074	0.700	-93.8	74.4 32.4 45.7	40.7	69.31516
6	-13.229	-16.525	955.00831	-57.3	11.5	-84.5	30.1	15.57515	0.767	-93.4	71.8 36.1 40.0	34.1	81.79987
7	-11.131	-16.994	931.41698	-64.1	9.9	-82.3	26.8	15.19443	0.800	-88.3	71.1 36.1 36.9	34.4	65.05314
8	-10.298	-16.350	904.83713	-65.6	8.8	-81.4	26.2	14.71748	0.842	-86.2	69.7 38.0 33.0	31.3	47.59277
9	-10.192	-15.924	945.03467	-68.9	9.9	-81.5	24.4	15.39873	0.781	-85.8	72.1 34.3 38.7	37.5	72.39210
10	-10.076	-13.154	998.27204	-71.4	10.9	-81.6	22.6	16.22124	0.711	-85.4	74.8 30.5 44.9	44.0	82.66647
11	-12.142	-12.564	1021.54705	-65.5	12.7	-84.3	25.8	16.64475	0.681	-91.0	75.5 30.4 47.2	44.3	64.98950
12	-14.567	-11.758	1057.49263	-59.7	14.9	-87.6	29.2	17.19346	0.639	-97.1	76.5 30.7 50.5	43.9	77.20235
13	-14.434	-14.862	995.52505	-56.2	13.2	-86.2	31.0	16.21396	0.714	-96.4	73.5 34.4 44.6	37.0	91.10664
14	-14.340	-17.529	946.40549	-51.9	11.5	-85.3	32.8	15.42043	0.777	-95.9	70.9 38.1 39.3	30.5	78.29990
15	-12.169	-17.996	922.38622	-58.6	10.0	-83.1	29.3	15.02923	0.814	-90.8	70.2 37.9 35.7	31.2	67.18609
16	-10.298	-18.350	904.83713	-65.6	8.8	-81.4	26.2	14.71748	0.842	-86.2	69.7 38.0 33.0	31.3	57.62998

JULY 31, 1964 13 HR 19 MIN 50 SEC 468 MS TAB NO 131 ATLAS PHOTO NO 131 POD SEQUENCE NO 265

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				358.331	796.15509	-6.688	-28.959	2531.610	2.250	-69.765	116.134		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.133	-15.527	952.31618	-62.5	11.3	-83.6	27.5	15.55200	0.753	-90.9	72.6 34.2 41.1	37.5	0.
3	-11.127	-17.030	919.31781	-64.1	9.9	-82.3	26.8	14.99706	0.801	-88.3	71.1 36.1 36.9	34.4	54.01065
4	-11.060	-14.432	966.05915	-67.2	11.1	-82.6	25.0	15.75552	0.736	-88.1	73.6 32.3 42.7	40.8	77.24947
5	-13.241	-13.833	992.75655	-61.0	12.9	-85.3	28.3	16.19486	0.701	-93.8	74.4 32.4 45.6	40.6	68.37803
6	-13.198	-16.568	942.55721	-57.4	11.4	-84.5	30.1	15.37210	0.768	-93.4	71.7 36.1 39.9	34.1	80.65699
7	-11.127	-17.030	919.31781	-64.1	9.9	-82.3	26.8	14.99706	0.801	-88.3	71.1 36.1 36.9	34.4	64.19018
8	-10.305	-18.368	893.10612	-65.6	8.8	-81.4	26.2	14.52667	0.842	-86.2	69.7 38.0 33.0	31.3	46.96210
9	-10.200	-15.974	932.73315	-68.9	9.9	-81.5	24.4	15.19830	0.782	-85.8	72.0 34.3 38.7	37.5	71.42471
10	-10.086	-13.243	985.14688	-71.3	10.9	-81.6	22.7	16.00802	0.712	-85.3	74.7 30.5 44.8	43.9	81.50293
11	-12.124	-12.663	1008.05999	-65.5	12.6	-84.3	25.8	16.42501	0.682	-91.0	75.4 30.4 47.1	44.2	64.11339
12	-14.517	-11.872	1043.38780	-59.7	14.8	-87.5	29.2	16.96414	0.640	-97.1	76.4 30.7 50.4	43.8	76.11214
13	-14.386	-14.930	982.44559	-56.2	13.1	-86.2	30.9	16.00096	0.715	-96.4	73.4 34.4 44.5	36.9	89.76088
14	-14.294	-17.559	937.01560	-51.9	11.5	-85.3	32.7	15.21925	0.778	-95.9	70.9 38.1 39.2	30.5	77.22401
15	-12.151	-18.018	910.40977	-58.6	10.0	-83.1	29.3	14.63410	0.815	-90.8	70.2 37.9 35.6	31.2	66.28655
16	-10.305	-18.368	893.10612	-65.6	8.8	-81.4	26.2	14.52667	0.842	-86.2	69.7 38.0 33.0	31.3	56.87681

JULY 31, 1964 13 HR 19 MIN 55 SEC 588 MS TAB NO 132 ATLAS PHOTO NO 132 POD SEQUENCE NO 267

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				353.211	785.34033	-6.728	-28.877	2520.796	2.254	-69.708	116.122		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.115	-15.584	939.70283	-62.5	11.3	-83.6	27.5	15.34601	0.754	-90.9	72.6 34.2 41.1	37.5	0.
3	-11.123	-17.066	907.19538	-64.1	9.9	-82.3	26.8	14.79930	0.801	-88.3	71.0 36.1 36.9	34.4	53.26327
4	-11.057	-14.504	953.22988	-67.2	11.1	-82.6	25.0	15.54630	0.736	-88.1	73.5 32.3 42.6	40.7	76.17361
5	-13.208	-13.916	979.50201	-61.1	12.9	-85.3	28.3	15.97864	0.702	-93.8	74.3 32.4 45.5	40.6	67.44023
6	-13.166	-16.612	930.08335	-57.4	11.4	-84.5	30.1	15.16867	0.768	-93.4	71.7 36.1 39.9	34.0	79.51413
7	-11.123	-17.066	907.19538	-64.1	9.9	-82.3	26.8	14.79930	0.801	-88.3	71.0 36.1 36.9	34.4	63.32614
8	-10.312	-18.386	881.35215	-65.6	8.8	-81.4	26.2	14.33549	0.842	-86.2	69.7 38.0 33.0	31.3	46.33048
9	-10.208	-16.024	920.40849	-68.8	9.9	-81.5	24.4	14.99750	0.782	-85.8	72.0 34.3 38.6	37.4	70.45599
10	-10.095	-13.332	972.00043	-71.3	10.9	-81.6	22.7	15.79446	0.713	-85.3	74.6 30.5 44.7	43.8	80.33958
11	-12.107	-12.762	994.55271	-65.5	12.6	-84.2	25.8	16.20444	0.683	-91.0	75.3 30.4 47.0	44.1	63.23640
12	-14.466	-11.986	1029.26627	-59.7	14.7	-87.5	29.2	16.73455	0.642	-97.1	76.3 30.7 50.3	43.7	75.02289
13	-14.338	-14.997	969.34491	-56.3	13.1	-86.2	30.9	15.78762	0.716	-96.4	73.3 34.4 44.4	36.9	88.41757
14	-14.247	-17.596	924.60351	-52.0	11.5	-85.3	32.7	15.01770	0.778	-95.9	70.8 38.1 39.2	30.5	76.14764
15	-12.134	-18.041	898.41028	-58.6	9.9	-83.1	29.3	14.63859	0.815	-90.8	70.2 37.9 35.6	31.2	65.38624
16	-10.312	-18.386	881.35215	-65.6	8.8	-81.4	26.2	14.33549	0.842	-86.2	69.7 38.0 33.0	31.3	56.12221

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JULY 31, 1964 13 HR 20 MIN 0 SEC 708 MS TAB NO 133 ATLAS PHOTO NO 133 POD SEQUENCE NO 269

TRAJECTORY DATA			SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ					
			348.092		774.51166	-6.768	-28.794	2509.967	2.257	-69.650	116.110					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.098	-15.643	927.03905	-62.5	11.3	-83.6	27.5	15.13920	0.755	-90.9	72.5	34.2	41.0	37.4	0.	1-2
3	-11.119	-17.103	895.02638	-64.1	9.9	-82.3	26.8	14.60079	0.801	-88.3	71.0	36.1	36.8	34.3	52.51185	2-3
4	-11.054	-14.578	940.34753	-67.2	11.1	-82.6	25.0	15.33622	0.737	-88.1	73.5	32.3	42.6	40.6	75.09135	3-4
5	-13.176	-14.000	966.19333	-61.1	12.8	-85.2	28.3	15.76154	0.703	-93.8	74.2	32.4	45.4	40.5	66.49894	4-5
6	-13.134	-16.657	917.56188	-57.4	11.4	-84.5	30.0	14.96448	0.769	-93.4	71.6	36.1	39.8	34.0	78.36470	5-6
7	-11.119	-17.103	895.02638	-64.1	9.9	-82.3	26.8	14.60079	0.801	-88.3	71.0	36.1	36.8	34.3	62.45879	6-7
8	-10.319	-18.405	869.55530	-65.6	8.8	-81.4	26.2	14.14361	0.842	-86.2	69.7	38.0	33.0	31.3	45.69525	7-8
9	-10.216	-16.076	908.03468	-68.8	9.8	-81.5	24.5	14.79589	0.783	-85.8	71.9	34.3	38.6	37.4	69.48135	8-9
10	-10.105	-13.423	958.79826	-71.3	10.9	-81.6	22.8	15.58000	0.715	-85.3	74.5	30.5	44.6	43.7	79.16953	9-10
11	-12.089	-12.863	980.98847	-65.5	12.6	-84.2	25.8	15.98393	0.685	-91.0	75.2	30.4	46.9	44.0	62.35617	10-11
12	-14.415	-12.102	1015.08773	-59.8	14.7	-87.4	29.2	16.50403	0.644	-97.1	76.1	30.7	50.1	43.6	73.93028	11-12
13	-14.290	-15.067	956.19308	-56.3	13.0	-86.2	30.9	15.57345	0.717	-96.4	73.3	34.4	44.3	36.8	87.06794	12-13
14	-14.201	-17.622	912.14673	-52.0	11.4	-85.3	32.6	14.81543	0.779	-95.9	70.8	38.1	39.1	30.4	75.06500	13-14
15	-12.116	-18.066	886.36679	-58.6	9.9	-83.1	29.3	14.44236	0.815	-90.8	70.2	37.9	35.6	31.2	64.48286	14-15
16	-10.319	-18.405	869.55530	-65.6	8.8	-81.4	26.2	14.14361	0.842	-86.2	69.7	38.0	33.0	31.3	55.36492	15-16

JULY 31, 1964 13 HR 20 MIN 5 SEC 828 MS TAB NO 134 ATLAS PHOTO NO 134 POD SEQUENCE NO 271

TRAJECTORY DATA			SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ				
			342.972			763.66940	-6.809	-28.711	2499.125	2.261	-69.592	116.099				
PHOTO DATA																
PT	LAT	LCN	RANGE	A/S/C	AZN	AZSUN	AZA	A*	B/A	ACFHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.080	-15.704	914.30820	-62.5	11.2	-83.6	27.5	14.93130	0.756	-90.9	72.5	34.2	40.9	37.3	0.	1-2
3	-11.115	-17.144	882.79673	-64.1	9.9	-82.3	26.8	14.40128	0.802	-88.3	71.0	36.1	36.8	34.3	51.75429	2-3
4	-11.051	-14.655	927.39352	-67.2	11.1	-82.6	25.1	15.12497	0.738	-88.1	73.4	32.3	42.5	40.6	73.99909	3-4
5	-13.143	-14.088	952.81059	-61.1	12.8	-85.2	28.3	15.54323	0.704	-93.8	74.1	32.4	45.3	40.4	65.55236	4-5
6	-13.102	-16.704	904.97778	-57.4	11.3	-84.5	30.0	14.75926	0.770	-93.4	71.6	36.1	39.8	33.9	77.20480	5-6
7	-11.115	-17.144	882.79673	-64.1	9.9	-82.3	26.8	14.40128	0.802	-88.3	71.0	36.1	36.8	34.3	61.58706	6-7
8	-10.326	-18.427	857.70352	-65.6	8.8	-81.4	26.2	13.95084	0.842	-86.2	69.6	38.0	32.9	31.2	45.05475	7-8
9	-10.225	-16.131	895.59597	-68.8	9.8	-81.5	24.5	14.59323	0.784	-85.8	71.9	34.3	38.5	37.3	68.49797	8-9
10	-10.115	-13.518	945.51962	-71.3	10.9	-81.6	22.8	15.36429	0.716	-85.3	74.4	30.6	44.5	43.7	77.98869	9-10
11	-12.071	-12.967	967.34518	-65.5	12.5	-84.2	25.8	15.76164	0.686	-91.0	75.1	30.4	46.8	43.9	61.47042	10-11
12	-14.364	-12.222	1000.82801	-59.8	14.6	-87.4	29.1	16.27220	0.645	-97.1	76.0	30.7	50.0	43.5	72.83243	11-12
13	-14.241	-15.139	942.97216	-56.3	13.0	-86.2	30.8	15.35815	0.718	-96.4	73.2	34.4	44.2	36.7	85.70688	12-13
14	-14.154	-17.657	899.63177	-52.1	11.4	-85.3	32.6	14.61221	0.780	-95.9	70.8	38.1	39.1	30.4	73.97268	13-14
15	-12.099	-18.093	874.26674	-58.7	9.9	-83.1	29.2	14.24520	0.816	-90.8	70.1	37.9	35.5	31.1	63.57566	14-15
16	-10.326	-18.427	857.70352	-65.6	8.8	-81.4	26.2	13.95084	0.842	-86.2	69.6	38.0	32.9	31.2	54.60387	15-16

JULY 31, 1964 13 HR 20 MIN 10 SEC 948 MS TAB NO 135 ATLAS PHOTO NO 135 POD SEQUENCE NO 273

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LGN	R	V	PTH	AZ			
				337.852				752.81299	-6.849	-28.627	2488.268	2.265	-69.533	116.086			
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.063	-15.766	901.55609	-62.5	11.2	-83.6	27.5	14.72305	0.756	-90.9	72.4	34.2	40.9	37.3	0.	1-2	
3	-11.111	-17.184	870.54494	-64.1	9.9	-82.3	26.8	14.20142	0.802	-88.3	70.9	36.1	36.7	34.2	50.99657	2-3	
4	-11.048	-14.732	914.41901	-67.2	11.0	-82.6	25.1	14.91338	0.739	-88.1	73.3	32.3	42.4	40.5	72.90677	3-4	
5	-13.110	-14.175	939.40890	-61.1	12.7	-85.2	28.3	15.32461	0.705	-93.8	74.0	32.4	45.2	40.3	64.60539	4-5	
6	-13.070	-16.752	892.37224	-57.4	11.3	-84.5	30.0	14.55369	0.770	-93.4	71.5	36.1	39.7	33.9	76.04555	5-6	
7	-11.111	-17.184	870.54494	-64.1	9.9	-82.3	26.8	14.20142	0.802	-88.3	70.9	36.1	36.7	34.2	60.71440	6-7	
8	-10.333	-18.449	845.82955	-65.6	8.7	-81.4	26.2	13.75771	0.843	-86.2	69.6	38.0	32.9	31.2	44.41347	7-8	
9	-10.233	-16.186	883.13556	-68.8	9.8	-81.4	24.5	14.39022	0.784	-85.8	71.8	34.3	38.5	37.2	67.51373	8-9	
10	-10.125	-13.612	932.22213	-71.2	10.9	-81.5	22.9	15.14827	0.717	-85.3	74.4	30.6	44.4	43.6	76.80884	9-10	
11	-12.054	-13.071	953.68631	-65.5	12.5	-84.1	25.8	15.53907	0.687	-91.0	75.0	30.4	46.7	43.8	60.58422	10-11	
12	-14.313	-12.341	986.55473	-59.8	14.5	-87.3	29.1	16.04014	0.647	-97.1	75.9	30.7	49.9	43.3	71.73571	11-12	
13	-14.193	-15.212	929.73185	-56.3	12.9	-86.2	30.8	15.14254	0.719	-96.4	73.1	34.4	44.2	36.6	84.34924	12-13	
14	-14.107	-17.691	887.09566	-52.1	11.3	-85.3	32.5	14.40865	0.780	-95.9	70.7	38.1	39.0	30.4	72.88045	13-14	
15	-12.081	-18.120	862.14451	-58.7	9.9	-83.1	29.2	14.04769	0.816	-90.8	70.1	37.9	35.5	31.1	62.66724	14-15	
16	-10.333	-18.449	845.82955	-65.6	8.7	-81.4	26.2	13.75771	0.843	-86.2	69.6	38.0	32.9	31.2	53.84153	15-16	

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JULY 31, 1964 13 HR 20 MIN 16 SEC 68 MS TAB NO 136 ATLAS PHOTO NO 136 POD SEQUENCE NO 275

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				332.732	741.94278	-6.891	-28.542	2477.398	2.269	-69.474	116.074					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.045	-15.828	888.78840	-62.5	11.2	-83.6	27.5	14.51454	0.757	-90.9	72.3	34.2	40.8	37.2	0.	1-2
3	-11.107	-17.225	858.27563	-64.1	9.8	-82.3	26.8	14.00127	0.803	-88.3	70.9	36.1	36.7	34.2	50.23939	2-3
4	-11.044	-14.809	901.42952	-67.2	11.0	-82.5	25.1	14.70155	0.746	-88.1	73.2	32.3	42.3	40.4	71.81524	3-4
5	-13.077	-14.262	925.99535	-61.1	12.7	-85.2	28.3	15.10580	0.706	-93.8	73.9	32.4	45.1	40.2	63.65875	4-5
6	-13.038	-16.800	879.75116	-57.5	11.3	-84.5	30.0	14.34787	0.771	-93.4	71.5	36.1	39.6	33.8	74.88803	5-6
7	-11.107	-17.225	858.27563	-64.1	9.8	-82.3	26.8	14.00127	0.803	-88.3	70.9	36.1	36.7	34.2	59.84138	6-7
8	-10.340	-18.471	833.93722	-65.6	8.7	-81.4	26.2	13.56428	0.843	-86.2	69.6	38.0	32.9	31.2	43.77205	7-8
9	-10.242	-16.241	870.65799	-68.7	9.8	-81.4	24.6	14.18692	0.785	-85.8	71.8	34.3	38.4	37.2	68.52921	8-9
10	-10.135	-13.706	918.91117	-71.2	10.9	-81.5	22.9	14.93204	0.718	-85.3	74.3	30.4	44.3	43.5	75.65069	9-10
11	-12.036	-13.175	940.01277	-65.5	12.5	-84.1	25.9	15.31631	0.689	-91.0	74.9	30.4	46.6	43.7	59.69843	10-11
12	-14.262	-12.460	972.27676	-59.8	14.5	-87.3	29.1	15.80801	0.649	-97.1	75.8	30.7	49.8	43.2	70.64136	11-12
13	-14.144	-15.284	916.47951	-56.3	12.9	-86.1	30.8	14.92673	0.720	-96.4	73.0	34.4	44.1	36.6	82.99647	12-13
14	-14.060	-17.726	874.54465	-52.1	11.3	-85.3	32.4	14.20485	0.781	-95.8	70.7	38.1	38.9	30.3	71.78926	13-14
15	-12.063	-18.147	850.00496	-58.7	9.9	-83.1	29.2	13.84960	0.816	-90.8	70.1	37.9	35.5	31.1	61.75899	14-15
16	-10.340	-18.471	833.93722	-65.6	8.7	-81.4	26.2	13.56428	0.843	-86.2	69.6	38.0	32.9	31.2	53.07857	15-16

JULY 31, 1964 13 HR 20 MIN 21 SEC 187 MS TAB NO 137 ATLAS PHOTO NO 137 POD SEQUENCE NO 277

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				327.612			731.05807	-6.932	-28.456	2466.513	2.272	-69.415	116.062			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZ/SUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.027	-15.890	876.00546	-62.5	11.1	-83.6	27.5	14.30579	0.758	-90.9	72.3	34.2	40.7	37.1	0.	1-2
3	-11.103	-17.265	845.98895	-64.1	9.6	-82.3	26.8	13.80063	0.803	-88.2	70.8	36.1	36.6	34.2	49.48299	2-3
4	-11.041	-14.887	888.42536	-67.1	11.0	-82.5	25.2	14.48948	0.741	-88.1	73.2	32.3	42.2	40.3	70.72462	3-4
5	-13.044	-14.390	912.57057	-61.1	12.6	-85.1	28.3	14.88680	0.708	-93.8	73.9	32.4	45.0	40.1	62.71284	4-5
6	-13.006	-16.848	867.11495	-57.5	11.2	-84.4	29.9	14.14160	0.772	-93.4	71.4	36.1	39.6	33.8	73.73237	5-6
7	-11.103	-17.265	845.98895	-64.1	9.8	-82.3	26.8	13.80063	0.803	-88.2	70.8	36.1	36.6	34.2	58.96829	6-7
8	-10.347	-18.493	822.02648	-65.5	8.7	-81.3	26.3	13.37055	0.843	-86.2	69.6	38.0	32.9	31.2	43.13061	7-8
9	-10.250	-16.296	858.16329	-68.7	9.8	-81.4	24.6	13.98335	0.785	-85.8	71.7	34.3	38.4	37.1	65.54446	8-9
10	-10.145	-13.801	905.58699	-71.2	10.9	-81.5	23.0	14.71559	0.719	-85.3	74.2	30.6	44.2	43.4	74.45447	9-10
11	-12.018	-13.279	926.33106	-65.5	12.4	-84.1	25.9	15.09340	0.690	-91.0	74.8	30.4	46.5	43.5	58.81304	10-11
12	-14.210	-12.578	957.99494	-59.8	14.4	-87.2	29.1	15.57561	0.651	-97.1	75.7	30.7	49.6	43.1	69.54988	11-12
13	-14.096	-15.356	903.21575	-56.4	12.8	-86.1	30.7	14.71073	0.721	-96.4	73.0	34.4	44.0	36.5	81.64869	12-13
14	-14.014	-17.760	861.97918	-52.2	11.3	-85.3	32.4	14.00081	0.782	-95.8	70.6	38.1	38.9	30.3	70.69927	13-14
15	-12.045	-18.174	837.84853	-58.7	9.9	-83.1	29.2	13.65162	0.817	-90.8	70.0	37.9	35.4	31.1	60.85097	14-15
16	-10.347	-18.493	822.02648	-65.5	8.7	-81.3	26.3	13.37055	0.843	-86.2	69.6	38.0	32.9	31.2	52.31498	15-16

JULY 31, 1964 13 HR 20 MIN 26 SEC 307 MS TAB NO 138 ATLAS PHOTO NO 138 POD SEQUENCE NO 279

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				322.492		720.15921	-6.974	-28.370	2455.615	2.276	-69.355	116.050				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.010	-15.952	863.20036	-62.5	11.1	-83.5	27.5	14.09667	0.759	-90.9	72.2	34.2	40.7	37.1	0.	1-2
3	-11.099	-17.306	833.67338	-64.1	9.8	-82.3	26.8	13.60002	0.804	-88.2	70.8	36.1	36.6	34.1	48.72623	2-3
4	-11.038	-14.964	875.39979	-67.1	11.0	-82.5	25.2	14.27706	0.742	-88.1	73.1	32.3	42.2	40.2	69.63378	3-4
5	-13.011	-14.437	899.12576	-61.1	12.6	-85.1	28.3	14.66748	0.707	-93.8	73.8	32.4	44.9	40.0	61.76627	4-5
6	-12.974	-16.896	854.45641	-57.5	11.2	-84.4	29.9	13.93526	0.772	-93.4	71.4	36.1	39.5	33.7	72.57716	5-6
7	-11.099	-17.306	833.67338	-64.1	9.8	-82.3	26.8	13.60002	0.804	-88.2	70.8	36.1	36.6	34.1	58.09412	6-7
8	-10.354	-18.515	810.09287	-65.5	8.7	-81.3	26.3	13.17645	0.843	-86.2	69.6	38.0	32.9	31.1	42.48835	7-8
9	-10.258	-16.351	845.64620	-68.7	9.8	-81.4	24.7	13.77941	0.786	-85.8	71.7	34.3	38.3	37.1	64.55885	8-9
10	-10.155	-13.895	892.24304	-71.1	10.9	-81.5	23.0	14.49881	0.720	-85.3	74.1	30.6	44.1	43.3	73.27895	9-10
11	-12.000	-13.383	912.63076	-65.5	12.4	-84.1	25.9	14.87018	0.691	-91.0	74.7	30.5	46.4	43.4	57.92716	10-11
12	-14.159	-12.697	943.69822	-59.8	14.3	-87.2	29.1	15.34338	0.652	-97.1	75.5	30.7	49.5	42.9	68.45907	11-12
13	-14.047	-15.428	889.93155	-56.4	12.8	-86.1	30.7	14.49440	0.722	-96.4	72.9	34.4	43.9	36.4	80.30408	12-13
14	-13.967	-17.795	864.39165	-52.2	11.2	-85.3	32.3	13.78641	0.782	-95.8	70.6	38.1	38.8	30.3	69.60919	13-14
15	-12.026	-18.202	825.46876	-58.7	9.8	-83.1	29.2	13.45336	0.817	-90.8	70.0	37.9	35.4	31.0	59.94180	14-15
16	-10.354	-18.515	810.09287	-65.5	8.7	-81.3	26.3	13.17645	0.843	-86.2	69.6	38.0	32.9	31.1	51.55016	15-16

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JULY 31, 1964 13 HR 20 MIN 31 SEC 427 MS

TAB NO 139

ATLAS PHOTO NO 139

POD SEQUENCE NO 281

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
										317.372	709.24615	-7.016	-28.283	2444.701	2.280	-69.294	116.037	
PHOTO DATA																		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-11.992	-16.013	850.40382	-62.5	11.1	-83.5	27.5	13.88769	0.759	-90.9	72.1	34.2	40.6	37.0	0.	1-2		
3	-11.095	-17.345	821.37285	-64.0	9.8	-82.3	26.8	13.39927	0.804	-88.2	70.8	36.1	36.6	34.1	47.97306	2-3		
4	-11.035	-15.040	862.38671	-67.1	11.0	-82.5	25.2	14.06484	0.743	-88.1	73.0	32.3	42.1	40.2	68.54910	3-4		
5	-12.978	-14.522	885.69775	-61.1	12.6	-85.1	28.3	14.44842	0.710	-93.8	73.7	32.4	44.8	39.9	60.82234	4-5		
6	-12.942	-16.942	841.80347	-57.5	11.2	-84.4	29.9	13.72902	0.773	-93.4	71.3	36.1	39.5	33.7	71.42954	5-6		
7	-11.095	-17.345	821.37285	-64.0	9.8	-82.3	26.8	13.39927	0.804	-88.2	70.8	36.1	36.6	34.1	57.22104	6-7		
8	-10.361	-18.536	798.15847	-65.5	8.7	-81.3	26.3	12.98234	0.844	-86.1	69.5	38.0	32.8	31.1	41.84833	7-8		
9	-10.267	-16.405	833.13538	-68.6	9.8	-81.4	24.7	13.57557	0.787	-85.8	71.6	34.3	38.3	37.0	63.57724	8-9		
10	-10.165	-13.988	878.91692	-71.1	10.9	-81.4	23.1	14.28232	0.721	-85.3	74.0	30.6	44.1	43.2	72.11159	9-10		
11	-11.982	-13.485	898.95226	-65.4	12.4	-84.0	25.9	14.64731	0.693	-90.9	74.6	30.5	46.3	43.3	57.04372	10-11		
12	-14.108	-12.813	929.43131	-59.8	14.3	-87.2	29.1	15.11142	0.654	-97.1	75.4	30.7	49.4	42.8	67.37366	11-12		
13	-13.999	-15.499	876.66061	-56.4	12.7	-86.1	30.7	14.27828	0.723	-96.4	72.8	34.4	43.8	36.3	78.97185	12-13		
14	-13.920	-17.828	836.80782	-52.3	11.2	-85.3	32.3	13.59206	0.783	-95.8	70.6	38.1	38.8	30.2	68.52518	13-14		
15	-12.010	-18.228	813.48978	-58.7	9.8	-83.1	29.2	13.25494	0.817	-90.8	70.0	37.9	35.3	31.0	59.03425	14-15		
16	-10.361	-18.536	798.15847	-65.5	8.7	-81.3	26.3	12.98234	0.844	-86.1	69.5	38.0	32.8	31.1	50.78576	15-16		

JULY 31, 1964 13 HR 20 MIN 36 SEC 547 MS

TAB NO 140

ATLAS PHOTO NO 140

POD SEQUENCE NO 283

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										312.252	698.31827	-7.059	-28.195	2433.774	2.284	-69.233	116.024
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.975	-16.072	837.61172	-62.5	11.1	-83.5	27.5	13.67879	0.760	-90.9	72.1	34.2	40.5	36.9	0.	1-2	
3	-11.091	-17.383	809.06577	-64.0	9.8	-82.3	26.8	13.19850	0.805	-88.2	70.7	36.1	36.5	34.0	47.22306	2-3	
4	-11.032	-15.114	849.38155	-67.1	11.0	-82.5	25.2	13.85275	0.744	-88.1	72.9	32.3	42.0	40.1	67.46978	3-4	
5	-12.945	-14.607	872.28161	-61.1	12.5	-85.1	28.3	14.22957	0.711	-93.8	73.6	32.4	44.7	39.8	59.88047	4-5	
6	-12.910	-16.987	829.15244	-57.5	11.1	-84.4	29.9	13.52270	0.774	-93.4	71.3	36.1	39.4	33.6	70.28852	5-6	
7	-11.091	-17.383	809.06577	-64.0	9.8	-82.3	26.8	13.19850	0.805	-88.2	70.7	36.1	36.5	34.0	56.34901	6-7	
8	-10.368	-18.556	786.22025	-65.5	8.7	-81.3	26.3	12.78816	0.844	-86.1	69.5	38.0	32.8	31.1	41.20998	7-8	
9	-10.275	-16.458	820.62697	-68.6	9.8	-81.4	24.7	13.37177	0.787	-85.8	71.6	34.3	38.2	37.0	62.59909	8-9	
10	-10.175	-14.080	865.60360	-71.1	10.8	-81.4	23.1	14.06603	0.722	-85.3	73.9	30.6	44.0	43.1	70.95127	9-10	
11	-11.964	-13.586	885.29017	-65.4	12.3	-84.0	25.9	14.42471	0.694	-90.9	74.5	30.5	46.2	43.2	56.16235	10-11	
12	-14.057	-12.928	915.18819	-59.8	14.2	-87.1	29.1	14.87966	0.656	-97.1	75.3	30.7	49.2	42.7	66.29307	11-12	
13	-13.950	-15.568	863.39834	-56.4	12.7	-86.1	30.6	14.06231	0.724	-96.4	72.8	34.4	43.7	36.3	77.65077	12-13	
14	-13.873	-17.861	824.27407	-52.3	11.1	-85.3	32.2	13.38771	0.783	-95.8	70.5	38.1	38.7	30.2	67.44647	13-14	
15	-11.992	-18.253	801.30819	-58.7	9.8	-83.1	29.1	13.05646	0.818	-90.8	70.0	37.9	35.3	31.0	58.12774	14-15	
16	-10.368	-18.556	786.22025	-65.5	8.7	-81.3	26.3	12.78816	0.844	-86.1	69.5	38.0	32.8	31.1	50.02137	15-16	

JULY 31, 1964 13 HR 20 MIN 41 SEC 667 MS

TAB NO 141

ATLAS PHOTO NO 141

POD SEQUENCE NO 285

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
										307.132	687.37625	-7.102	-28.106	2422.832	2.288	-69.171	116.011
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.957	-16.132	824.79517	-62.5	11.0	-83.5	27.5	13.46949	0.761	-90.9	72.0	34.2	40.5	36.9	0.	1-2	
3	-11.087	-17.422	796.73392	-64.0	9.8	-82.2	26.9	12.99733	0.805	-88.2	70.7	36.1	36.5	34.0	46.47244	2-3	
4	-11.028	-15.189	836.35252	-67.1	10.9	-82.5	25.3	13.64027	0.744	-88.1	72.9	32.3	42.0	40.0	66.38976	3-4	
5	-12.912	-14.691	858.84270	-61.1	12.5	-85.1	28.3	14.01034	0.712	-93.8	73.5	32.4	44.7	39.7	58.93776	4-5	
6	-12.878	-17.033	816.47694	-57.6	11.1	-84.4	29.8	13.31599	0.774	-93.4	71.2	36.1	39.3	33.6	69.14737	5-6	
7	-11.087	-17.422	796.73392	-64.0	9.8	-82.2	26.9	12.99733	0.805	-88.2	70.7	36.1	36.5	34.0	55.47557	6-7	
8	-10.375	-18.577	774.25750	-65.5	8.7	-81.3	26.3	12.59359	0.844	-86.1	69.5	38.0	32.8	31.1	40.57058	7-8	
9	-10.284	-16.511	808.09401	-68.6	9.8	-81.4	24.8	13.16756	0.788	-85.8	71.5	34.3	38.2	36.9	61.61962	8-9	
10	-10.185	-14.172	852.26768	-71.0	10.8	-81.4	23.2	13.84937	0.723	-85.3	73.8	30.6	43.9	43.0	69.79115	9-10	
11	-11.947	-13.687	871.60630	-65.4	12.3	-84.0	26.0	14.20176	0.695	-90.9	74.4	30.5	46.1	43.1	55.28017	10-11	
12	-14.006	-13.043	900.92645	-59.8	14.2	-87.1	29.0	14.64798	0.657	-97.1	75.2	30.7	49.1	42.6	65.21276	11-12	
13	-13.902	-15.637	850.11310	-56.4	12.6	-86.0	30.6	13.84595	0.725	-96.4	72.7	34.4	43.6	36.2	76.33176	12-13	
14	-13.826	-17.893	811.61638	-52.3	11.1	-85.3	32.2	13.18297	0.784	-95.8	70.5	38.1	38.7	30.2	66.36716	13-14	
15	-11.975	-18.276	789.10192	-58.8	9.8	-83.1	29.1	12.85757	0.818	-90.8	69.9	37.9	35.3	30.9	57.21994	14-15	
16	-10.375	-18.577	774.25750	-65.5	8.7	-81.3	26.3	12.59359	0.844	-86.1	69.5	38.0	32.8	31.1	49.25564	15-16	

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JULY 31, 1964 13 HR 20 MIN 46 SEC 787 MS TAB NO 142 ATLAS PHOTO NO 142 POD SEQUENCE NO 287

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				302.012			676.41962	-7.146	-28.017	2411.875	2.292	-69.109	115.998			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.939	-16.190	811.99535	-62.5	11.0	-83.5	27.5	13.26046	0.761	-90.9	72.0	34.2	40.4	36.8	0	1-2
3	-11.083	-17.459	784.41212	-64.0	9.8	-82.2	26.9	12.79632	0.805	-88.2	70.7	36.1	36.4	34.0	45.72630	2-3
4	-11.025	-15.262	823.34539	-67.0	10.9	-82.4	25.3	13.42814	0.745	-88.1	72.8	32.3	41.9	39.9	65.31773	3-4
5	-12.879	-14.774	845.43005	-61.1	12.4	-85.0	26.2	12.79154	0.713	-93.8	73.4	32.4	44.6	39.7	57.99818	4-5
6	-12.846	-17.077	803.81414	-57.6	11.1	-84.4	29.8	12.10948	0.775	-93.4	71.2	36.1	39.3	33.6	68.01567	5-6
7	-11.083	-17.459	784.41212	-64.0	9.8	-82.2	26.9	12.79632	0.805	-88.2	70.7	36.1	36.4	34.0	54.60385	6-7
8	-10.382	-18.595	762.30011	-65.5	8.7	-81.3	26.3	12.39910	0.844	-86.1	69.5	38.0	32.8	31.1	39.93411	7-8
9	-10.292	-16.562	795.57557	-68.6	9.8	-81.4	24.8	12.96359	0.788	-85.8	71.5	34.3	38.1	36.9	60.64572	8-9
10	-10.194	-14.261	838.96046	-71.0	10.8	-81.4	23.2	13.43318	0.724	-85.3	73.6	30.6	43.8	42.9	68.64118	9-10
11	-11.929	-13.744	857.95517	-65.4	12.3	-83.9	26.0	13.97934	0.696	-90.9	74.3	30.4	46.0	43.0	54.40114	10-11
12	-13.955	-13.155	886.70548	-59.8	14.1	-87.0	29.0	14.41677	0.659	-97.1	75.1	30.7	49.0	42.5	64.13837	11-12
13	-13.853	-15.705	836.84923	-56.5	12.6	-86.0	30.6	13.62994	0.726	-96.4	72.6	34.4	43.6	36.1	75.02746	12-13
14	-13.779	-17.924	799.01821	-52.4	11.1	-85.3	32.1	12.97839	0.785	-95.8	70.5	38.1	38.6	30.2	65.29558	13-14
15	-11.957	-18.301	776.90230	-58.8	9.8	-83.1	29.1	12.65880	0.818	-90.8	69.9	37.9	35.3	30.9	56.31387	14-15
16	-10.382	-18.595	762.30011	-65.5	8.7	-81.3	26.3	12.39910	0.844	-86.1	69.5	38.0	32.8	31.1	48.49060	15-16

JULY 31, 1964 13 HR 20 MIN 51 SEC 907 MS TAB NO 143 ATLAS PHOTO NO 143 POD SEQUENCE NO 289

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				296.893			665.44791	-7.189	-27.926	2400.903	2.296	-69.047	115.985			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.921	-16.246	799.19768	-62.5	11.0	-83.5	27.5	13.05146	0.762	-90.8	71.9	34.2	40.4	36.8	0	1-2
3	-11.078	-17.494	772.08804	-64.0	9.8	-82.2	26.9	12.59527	0.806	-88.2	70.6	36.1	36.4	33.9	44.98290	2-3
4	-11.022	-15.334	810.34397	-67.0	10.9	-82.4	25.3	12.21611	0.746	-88.1	72.7	32.3	41.8	39.9	64.25059	3-4
5	-12.846	-14.855	832.02621	-61.1	12.4	-85.0	26.2	13.57228	0.714	-93.8	73.4	32.4	44.5	39.6	57.06025	4-5
6	-12.814	-17.119	791.15079	-57.6	11.0	-84.4	29.8	12.90296	0.775	-93.4	71.1	36.1	39.2	33.5	66.88994	5-6
7	-11.078	-17.494	772.08804	-64.0	9.8	-82.2	26.9	12.59527	0.806	-88.2	70.6	36.1	36.4	33.9	52.73270	6-7
8	-10.389	-18.613	750.33745	-65.5	8.7	-81.3	26.4	12.20452	0.844	-86.1	69.5	38.0	32.8	31.1	39.29913	7-8
9	-10.300	-16.612	783.05781	-68.5	9.8	-81.3	24.8	12.75963	0.788	-85.8	71.4	34.3	38.1	36.8	59.67499	8-9
10	-10.204	-14.350	825.66376	-71.0	10.8	-81.4	23.3	13.41715	0.725	-85.3	73.6	30.6	43.7	42.8	47.97818	9-10
11	-11.910	-13.883	844.31741	-65.4	12.2	-83.9	26.0	13.75713	0.697	-90.9	74.2	30.4	45.9	42.9	53.52375	10-11
12	-13.904	-13.766	872.50409	-59.8	14.0	-87.0	29.0	14.18588	0.660	-97.1	75.0	30.7	48.9	42.4	63.06799	11-12
13	-13.804	-15.771	823.59097	-56.5	12.5	-86.0	30.5	13.41402	0.727	-96.4	72.6	34.4	43.5	36.1	73.73322	12-13
14	-13.732	-17.953	786.41763	-52.4	11.0	-85.3	32.1	12.77375	0.785	-95.8	70.4	38.1	38.6	30.1	64.22877	13-14
15	-11.938	-18.324	764.69810	-58.8	9.8	-83.1	29.1	12.45995	0.818	-90.8	69.9	37.9	35.2	30.9	55.40849	14-15
16	-10.389	-18.613	750.33745	-65.5	8.7	-81.3	26.4	12.20452	0.844	-86.1	69.5	38.0	32.8	31.1	47.72550	15-16

JULY 31, 1964 13 HR 20 MIN 57 SEC 27 MS TAB NO 144 ATLAS PHOTO NO 144 POD SEQUENCE NO 291

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ			
				291.773		654.46164	-7.233	-27.835	2389.917	2.300	-68.984	115.971			
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.903	-16.304	786.37199	-62.5	11.0	-83.5	27.5	12.84201	0.763	-90.8	71.9	34.2	40.3	36.7	1-2
3	-11.074	-17.530	759.73606	-64.0	9.8	-82.2	26.9	12.39377	0.806	-88.2	70.6	36.1	36.4	33.9	2-3
4	-11.018	-15.406	797.31473	-67.0	10.9	-82.4	25.3	12.00362	0.747	-88.1	72.7	32.3	41.8	39.8	3-4
5	-12.813	-14.936	818.59543	-61.1	12.4	-85.0	26.2	13.35379	0.715	-93.8	73.3	32.4	44.4	39.5	4-5
6	-12.782	-17.162	778.45975	-57.6	11.0	-84.4	29.7	12.69599	0.776	-93.4	71.1	36.1	39.2	33.5	5-6
7	-11.074	-17.530	759.73606	-64.0	9.8	-82.2	26.9	12.39377	0.806	-88.2	70.6	36.1	36.4	33.9	6-7
8	-10.395	-18.631	738.34754	-65.5	8.7	-81.3	26.4	12.00950	0.844	-86.1	69.5	38.0	32.8	31.1	7-8
9	-10.308	-16.663	770.51208	-68.5	9.8	-81.3	24.8	12.55522	0.789	-85.8	71.4	34.3	38.0	36.8	8-9
10	-10.213	-14.438	812.34005	-70.9	10.8	-81.3	23.3	13.20068	0.726	-85.3	73.6	30.6	43.7	42.7	9-10
11	-11.892	-13.981	830.65324	-65.4	12.2	-83.9	26.0	13.53450	0.699	-90.9	74.1	30.4	45.8	42.8	10-11
12	-13.853	-13.377	858.27892	-59.9	14.0	-87.0	29.0	12.95460	0.662	-97.1	74.9	30.7	48.8	42.2	11-12
13	-13.756	-15.837	810.30592	-56.5	12.5	-86.0	30.5	13.19767	0.726	-96.4	72.5	34.4	43.4	36.0	12-13
14	-13.684	-17.983	773.79015	-52.4	11.0	-85.3	32.0	12.56869	0.786	-95.8	70.4	38.1	38.5	30.1	13-14
15	-11.920	-18.347	752.46640	-58.8	9.7	-83.1	29.1	12.26065	0.819	-90.8	69.9	37.9	35.2	30.9	14-15
16	-10.395	-18.631	738.34754	-65.5	8.7	-81.3	26.4	12.00950	0.844	-86.1	69.5	38.0	32.8	31.1	15-16

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JULY 31, 1964 13 HR 21 MIN 2 SEC 147 MS TAB NO 145 ATLAS PHOTO NO 145 POD SEQUENCE NO 293

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LEN	R	V	PTH	AZ				
				266.653	643.46072	-7.278	-27.743	2378.916	2.304	-68.920	115.958				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.885	-16.363	773.48341	-62.5	11.0	-83.5	27.5	12.63153	0.763	-90.8	71.8	34.2	40.2	36.7	0.
3	-11.070	-17.569	747.32606	-64.0	9.8	-82.2	26.9	12.19133	0.806	-88.2	70.6	36.0	36.4	33.9	43.48875
4	-11.015	-15.481	746.21763	-67.0	10.9	-82.4	25.4	12.79003	0.747	-88.0	72.6	32.3	41.7	39.7	62.10448
5	-12.780	-15.020	805.09679	-61.1	12.3	-85.0	28.2	13.13358	0.716	-93.7	73.2	32.4	44.3	39.4	55.17781
6	-12.749	-17.208	765.71078	-57.7	11.0	-84.4	29.7	12.48808	0.776	-93.4	71.1	36.1	39.1	33.5	64.62758
7	-11.070	-17.569	747.32606	-64.0	9.8	-82.2	26.9	12.19133	0.806	-88.2	70.6	36.0	36.4	33.9	51.98362
8	-10.402	-18.651	726.30420	-65.4	8.7	-81.3	26.4	11.81361	0.844	-86.1	69.4	38.0	32.8	31.0	38.02204
9	-10.316	-16.716	757.90374	-68.5	9.8	-81.3	24.9	12.34979	0.789	-85.8	71.3	34.3	38.0	36.7	57.72161
10	-10.223	-14.530	798.94344	-70.9	10.8	-81.3	23.4	12.98303	0.727	-85.3	73.5	30.5	43.6	42.7	65.19989
11	-11.874	-14.081	816.91580	-65.4	12.2	-83.9	26.0	13.31067	0.700	-90.9	74.0	30.4	45.7	42.7	51.76234
12	-13.802	-13.491	843.98131	-59.9	13.9	-86.9	29.0	13.72215	0.663	-97.1	74.8	30.7	48.7	42.1	60.92299
13	-13.707	-15.907	796.95847	-56.6	12.4	-86.0	30.5	12.98030	0.729	-96.4	72.4	34.4	43.3	35.9	71.13684
14	-13.637	-18.015	761.10970	-52.5	11.0	-85.3	31.9	12.36276	0.786	-95.8	70.4	38.1	38.5	30.1	62.08409
15	-11.902	-18.372	740.18121	-58.8	9.7	-83.1	29.0	12.06048	0.819	-90.8	69.8	37.9	35.2	30.9	53.59211
16	-10.402	-18.651	726.30420	-65.4	8.7	-81.3	26.4	11.81361	0.844	-86.1	69.4	38.0	32.8	31.0	46.18890

JULY 31, 1964 13 HR 21 MIN 7 SEC 267 MS TAB NO 146 ATLAS PHOTO NO 146 POD SEQUENCE NO 295

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LEN	R	V	PTH	AZ				
				281.533	632.44427	-7.323	-27.649	2367.900	2.309	-68.856	115.944				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.868	-16.424	760.54893	-62.5	10.9	-83.4	27.5	12.42030	0.764	-90.8	71.7	34.2	40.2	36.6	0.
3	-11.066	-17.609	734.87244	-64.0	9.7	-82.2	26.9	11.98817	0.807	-88.2	70.5	36.0	36.3	33.8	42.73618
4	-11.011	-15.557	771.07232	-67.0	10.9	-82.4	25.4	12.57565	0.748	-88.0	72.5	32.3	41.6	39.7	61.02179
5	-12.747	-15.106	791.55045	-61.1	12.3	-84.9	28.2	12.91260	0.717	-93.7	73.1	32.4	44.2	39.3	54.23210
6	-12.717	-17.255	752.91837	-57.7	11.0	-84.4	29.7	12.27946	0.777	-93.4	71.0	36.1	39.1	33.4	63.48688
7	-11.066	-17.609	734.87244	-64.0	9.7	-82.2	26.9	11.98817	0.807	-88.2	70.5	36.0	36.3	33.8	51.10487
8	-10.409	-18.673	714.21979	-65.4	8.7	-81.3	26.4	11.61706	0.844	-86.1	69.4	38.0	32.7	31.0	37.37834
9	-10.325	-16.770	745.24960	-68.5	9.8	-81.3	24.9	12.14361	0.790	-85.8	71.3	34.3	37.9	36.7	56.73590
10	-10.233	-14.624	785.49671	-70.9	10.8	-81.3	23.4	12.76456	0.728	-85.3	73.4	30.5	43.5	42.6	64.04096
11	-11.857	-14.184	803.12844	-65.4	12.2	-83.8	26.0	13.08603	0.701	-90.9	73.9	30.4	45.6	42.6	50.87682
12	-13.750	-13.606	829.63560	-59.9	13.9	-86.9	28.9	13.48891	0.665	-97.1	74.6	30.7	48.5	42.0	59.84656
13	-13.658	-15.477	783.56598	-56.6	12.4	-86.0	30.4	12.76219	0.730	-96.4	72.3	34.4	43.2	35.9	69.82971
14	-13.590	-18.048	748.38860	-52.6	10.9	-85.3	31.9	12.15617	0.781	-95.8	70.3	38.1	38.4	30.1	61.00275
15	-11.885	-18.398	727.85480	-58.9	9.7	-83.1	29.0	11.85964	0.814	-90.8	69.6	37.9	35.2	30.9	52.68022
16	-10.409	-18.673	714.21979	-65.4	8.7	-81.3	26.4	11.61706	0.844	-86.1	69.4	38.0	32.7	31.0	45.41672

JULY 31, 1964 13 HR 21 MIN 12 SEC 386 MS TAB NO 147 ATLAS PHOTO NO 147 POD SEQUENCE NO 297

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LEN	R	V	PTH	AZ				
				276.413	621.41305	-7.368	-27.555	2356.868	2.313	-68.791	115.930				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCO PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.850	-16.486	747.58797	-62.5	10.9	-83.4	27.5	12.20864	0.765	-90.8	71.7	34.2	40.1	36.6	0.
3	-11.062	-17.650	722.39207	-64.0	9.7	-82.2	26.9	11.78457	0.807	-88.2	70.5	36.0	36.3	33.8	41.98283
4	-11.008	-15.634	757.90115	-67.0	10.9	-82.3	25.4	12.36085	0.749	-88.0	72.4	32.3	41.6	39.6	59.93835
5	-12.713	-15.192	777.97913	-61.1	12.3	-84.9	28.2	12.69122	0.718	-93.7	73.0	32.4	44.1	39.3	53.28517
6	-12.685	-17.302	740.09949	-57.7	10.9	-84.4	29.7	12.07040	0.776	-93.4	71.0	36.1	39.0	33.4	62.34587
7	-11.062	-17.650	722.39207	-64.0	9.7	-82.2	26.9	11.78457	0.807	-88.2	70.5	36.0	36.3	33.8	50.22467
8	-10.417	-18.695	702.10899	-65.4	8.7	-81.3	26.4	11.42007	0.845	-86.1	69.4	38.0	32.7	31.0	36.73343
9	-10.333	-16.825	732.56896	-68.4	9.8	-81.3	24.9	11.93699	0.790	-85.8	71.2	34.3	37.9	36.6	55.74870
10	-10.243	-14.717	772.02534	-70.8	10.8	-81.3	23.5	12.94570	0.729	-85.3	73.3	30.5	43.4	42.5	62.88204
11	-11.839	-14.286	789.31710	-65.4	12.1	-83.8	26.1	12.86099	0.702	-90.9	73.8	30.4	45.5	42.5	49.99008
12	-13.699	-13.722	815.26875	-59.9	13.8	-86.8	28.9	13.25533	0.667	-97.1	74.5	30.7	48.4	41.9	58.77037
13	-13.609	-16.048	770.14828	-56.6	12.3	-86.0	30.4	12.54368	0.731	-96.4	72.3	34.4	43.2	35.8	68.52433
14	-13.543	-18.082	735.64153	-52.6	10.9	-85.3	31.8	11.94916	0.787	-95.8	70.3	38.1	38.4	30.0	59.92061
15	-11.867	-18.425	715.50174	-58.9	9.7	-83.1	29.0	11.65836	0.820	-90.8	69.8	37.9	35.1	30.8	51.76680
16	-10.417	-18.695	702.10899	-65.4	8.7	-81.3	26.4	11.42007	0.845	-86.1	69.4	38.0	32.7	31.0	44.64298

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JULY 31, 1964 13 HR 21 MIN 17 SEC 506 MS TAB NO 148 ATLAS PHOTO NO 148 POD SEQUENCE NO 299

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
271.293 610.36612 -7.414 -27.461 2345.821 2.317 -68.726 115.916

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.832	-16.547	734.61320	-62.5	10.9	-83.4	27.5	11.99675	0.765	-90.8	71.6	34.2	40.1	36.5	0.	1-2
3	-11.058	-17.690	709.89562	-64.0	9.7	-82.2	26.9	11.58072	0.807	-88.2	70.4	36.0	36.2	33.8	41.23032	2-3
4	-11.005	-15.711	744.71821	-66.9	10.8	-82.3	25.5	12.14586	0.750	-88.0	72.4	32.3	41.5	39.5	58.85677	3-4
5	-12.680	-15.276	764.39811	-61.1	12.2	-84.9	28.2	12.46967	0.719	-93.7	72.9	32.4	44.1	39.2	52.33842	4-5
6	-12.652	-17.349	727.26556	-57.7	10.9	-84.4	29.6	11.86110	0.778	-93.4	70.9	36.1	39.0	33.3	61.20756	5-6
7	-11.058	-17.690	709.89562	-64.0	9.7	-82.2	26.9	11.58072	0.807	-88.2	70.4	36.0	36.2	33.8	49.34390	6-7
8	-10.424	-18.716	689.98087	-65.4	8.7	-81.3	26.4	11.22261	0.845	-86.1	69.4	38.0	32.7	31.0	36.08861	7-9
9	-10.342	-16.880	719.87385	-68.4	9.8	-81.3	25.0	11.73015	0.791	-85.8	71.2	35.3	37.9	36.6	54.76224	8-9
10	-10.253	-14.811	758.54515	-70.8	10.8	-81.2	23.5	12.32668	0.730	-85.3	73.2	30.5	43.3	42.4	61.72616	9-10
11	-11.821	-14.389	775.49874	-65.3	12.1	-83.6	26.1	12.63585	0.704	-90.9	73.7	30.4	45.4	42.4	49.10369	10-11
12	-13.648	-13.837	800.89932	-59.9	13.7	-86.8	28.9	11.22171	0.668	-97.1	74.4	30.7	48.3	41.8	57.69593	11-12
13	-13.560	-16.119	756.71920	-56.6	12.3	-85.9	30.4	12.32497	0.732	-96.4	72.2	34.4	43.1	35.7	67.22463	12-13
14	-13.495	-18.116	722.87661	-52.7	10.9	-85.3	31.8	11.74189	0.788	-95.8	70.3	38.1	38.3	30.0	58.84027	13-14
15	-11.849	-18.452	703.13158	-58.9	9.7	-83.1	29.0	11.45681	0.820	-90.8	69.8	37.9	35.1	30.8	50.85323	14-15
16	-10.424	-18.716	689.98087	-65.4	8.7	-81.3	26.4	11.22261	0.845	-86.1	69.4	38.0	32.7	31.0	43.68822	15-16

JULY 31, 1964 13 HR 21 MIN 22 SEC 626 MS TAB NO 149 ATLAS PHOTO NO 149 POD SEQUENCE NO 301

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
266.173 599.30420 -7.460 -27.365 2334.759 2.321 -68.660 115.902

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.814	-16.609	721.61636	-62.5	10.9	-83.4	27.5	11.78450	0.766	-90.8	71.6	34.2	40.0	36.4	0.	1-2
3	-11.054	-17.730	697.37607	-64.0	9.7	-82.2	26.9	11.37648	0.808	-88.2	70.4	36.0	36.2	33.7	40.47757	2-3
4	-11.001	-15.787	731.51418	-66.9	10.8	-82.3	25.5	11.93052	0.751	-88.0	72.3	32.3	41.4	39.4	57.77527	3-4
5	-12.647	-15.364	750.79732	-61.1	12.2	-84.9	28.2	12.24780	0.720	-93.7	72.8	32.4	44.0	39.1	51.39105	4-5
6	-12.620	-17.396	714.40903	-57.7	10.9	-84.4	29.6	11.65143	0.775	-93.4	70.9	36.1	38.9	33.3	60.06995	5-6
7	-11.054	-17.730	697.37607	-64.0	9.7	-82.2	26.9	11.37648	0.808	-88.2	70.4	36.0	36.2	33.7	48.46186	6-7
8	-10.431	-18.738	677.82944	-65.4	8.7	-81.3	26.4	11.02516	0.845	-86.1	69.4	38.0	32.7	31.0	35.44315	7-8
9	-10.350	-16.935	707.15636	-68.4	9.8	-81.2	25.0	11.52293	0.791	-85.7	71.1	34.3	37.8	36.5	53.77506	8-9
10	-10.261	-14.904	745.04575	-70.7	10.8	-81.2	23.6	12.10735	0.731	-85.3	73.1	30.5	43.2	42.3	60.57129	9-10
11	-11.802	-14.491	761.66216	-65.3	12.1	-83.7	26.1	12.41040	0.705	-90.9	73.6	30.4	45.3	42.3	48.21646	10-11
12	-13.596	-13.952	786.51502	-59.9	13.7	-86.7	28.9	12.78784	0.670	-97.1	74.3	30.7	48.2	41.7	56.62216	11-12
13	-13.511	-16.190	743.26968	-56.6	12.2	-85.9	30.3	12.10594	0.733	-96.4	72.1	34.4	43.0	35.7	65.92787	12-13
14	-13.447	-18.149	710.09329	-52.7	10.8	-85.3	31.7	11.53425	0.788	-95.8	70.2	38.1	38.3	30.0	57.76002	13-14
15	-11.830	-18.479	690.73803	-58.9	9.7	-83.1	29.0	11.25487	0.820	-90.8	69.7	37.9	35.1	30.8	49.93862	14-15
16	-10.431	-18.738	677.82744	-65.4	8.7	-81.3	26.4	11.02516	0.845	-86.1	69.4	38.0	32.7	31.0	43.09214	15-16

JULY 31, 1964 13 HR 21 MIN 27 SEC 746 MS TAB NO 150 ATLAS PHOTO NO 150 POD SEQUENCE NO 303

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
261.053 588.22690 -7.507 -27.268 2323.682 2.326 -68.593 115.887

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.796	-16.671	708.59116	-62.5	10.9	-83.4	27.5	11.57179	0.767	-90.8	71.5	34.1	39.9	36.4	0.	1-2
3	-11.049	-17.771	684.82804	-64.0	9.7	-82.2	26.9	11.17178	0.808	-88.2	70.4	36.0	36.2	33.7	39.72390	2-3
4	-10.998	-15.865	718.78229	-66.9	10.8	-82.3	25.5	11.71473	0.752	-88.0	72.2	32.3	41.3	39.4	56.69270	3-4
5	-12.613	-15.450	737.16950	-61.1	12.1	-84.8	28.2	12.02549	0.722	-93.7	72.8	32.4	43.9	39.0	50.44225	4-5
6	-12.587	-17.444	701.52426	-57.8	10.8	-84.4	29.6	11.44130	0.775	-93.4	70.8	36.1	38.9	33.2	58.93171	5-6
7	-11.049	-17.771	684.82804	-64.0	9.7	-82.2	26.9	11.17178	0.808	-88.2	70.4	36.0	36.2	33.7	47.57825	6-7
8	-10.437	-18.760	665.65001	-65.3	8.7	-81.2	26.5	10.82706	0.845	-86.1	69.3	38.0	32.7	31.0	34.79640	7-8
9	-10.359	-16.990	694.41058	-68.3	9.8	-81.2	25.1	11.31526	0.792	-85.7	71.1	34.3	37.8	36.5	52.78621	8-9
10	-10.273	-14.959	731.51966	-70.7	10.8	-81.2	23.6	11.88759	0.732	-85.3	73.0	30.5	43.1	42.2	59.41615	9-10
11	-11.784	-14.594	747.79948	-65.3	12.0	-83.7	26.1	12.18453	0.706	-90.9	73.5	30.4	45.2	42.2	47.32805	10-11
12	-13.545	-14.068	772.10728	-59.9	13.6	-86.7	28.9	12.55159	0.671	-97.1	74.2	30.7	48.0	41.5	55.54815	11-12
13	-13.462	-16.261	729.79401	-56.7	12.2	-85.9	30.3	11.88646	0.734	-96.4	72.0	34.4	42.9	35.6	64.63250	12-13
14	-13.400	-18.183	697.28020	-52.8	10.8	-85.3	31.7	11.32616	0.789	-95.8	70.2	38.1	38.2	29.9	56.67873	13-14
15	-11.812	-18.506	678.31618	-58.9	9.6	-83.1	28.9	11.05247	0.820	-90.8	69.7	37.9	35.0	30.8	49.02235	14-15
16	-10.437	-18.760	665.65001	-65.3	8.7	-81.2	26.5	10.82706	0.845	-86.1	69.3	38.0	32.7	31.0	42.31440	15-16

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JULY 31, 1964 13 HR 21 MIN 32 SEC 866 MS

TAB NO 151

ATLAS PHOTO NO 151

POD SEQUENCE NO 305

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				255.933		577.13364		-7.554		-27.170		2312.589		2.330		-68.526		115.877	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.777	-16.734	695.51440	-62.5	10.8	-83.4	27.5	11.35824	0.767	-90.8	71.4	34.1	39.9	36.3	0.	1-2			
3	-11.045	-17.813	672.23156	-64.0	9.7	-82.2	26.9	10.96629	0.808	-88.2	70.3	36.0	36.1	33.7	38.96663	2-3			
4	-10.994	-15.943	704.99718	-66.9	10.8	-82.3	25.5	11.49806	0.752	-88.0	72.1	32.3	41.3	39.3	55.60474	3-4			
5	-12.579	-15.538	723.48740	-61.1	12.1	-84.8	28.2	11.80229	0.723	-93.7	72.7	32.4	43.8	38.9	49.49010	4-5			
6	-12.554	-17.493	688.58987	-57.8	10.8	-84.4	29.6	11.23036	0.780	-93.4	70.8	36.1	38.8	33.2	57.78805	5-6			
7	-11.045	-17.813	672.23156	-64.0	9.7	-82.2	26.9	10.96629	0.808	-88.2	70.3	36.0	36.1	33.7	46.69142	6-7			
8	-10.444	-18.784	653.42526	-65.3	8.7	-81.2	26.5	10.62822	0.845	-86.1	69.3	38.0	32.7	30.9	34.14622	7-8			
9	-10.367	-17.047	681.61464	-68.3	9.8	-81.2	25.1	11.10676	0.793	-85.7	71.0	34.3	37.7	36.4	51.79212	8-9			
10	-10.283	-15.094	717.93893	-70.7	10.8	-81.2	23.7	11.66694	0.733	-85.3	72.9	30.5	43.1	42.1	58.25567	9-10			
11	-11.766	-14.699	733.88087	-65.3	12.0	-83.7	26.2	11.95775	0.707	-90.9	73.4	30.4	45.1	42.1	46.43615	10-11			
12	-13.493	-14.185	757.64349	-59.9	13.6	-86.7	28.9	12.31844	0.673	-97.0	74.1	30.7	47.9	41.4	54.47086	11-12			
13	-13.412	-16.334	716.26408	-56.7	12.2	-85.9	30.2	11.66613	0.735	-96.4	72.0	34.4	42.8	35.5	63.33221	12-13			
14	-13.351	-18.219	684.41968	-52.8	10.8	-85.3	31.6	11.11730	0.790	-95.8	70.1	38.1	38.2	29.9	55.59206	13-14			
15	-11.793	-18.535	665.84773	-58.9	9.6	-83.1	28.9	10.84931	0.821	-90.8	69.7	37.9	35.0	30.7	48.10312	14-15			
16	-10.444	-18.784	653.42528	-65.3	8.7	-81.2	26.5	10.62822	0.845	-86.1	69.3	38.0	32.7	30.9	41.53363	15-16			

JULY 31, 1964 13 HR 21 MIN 37 SEC 986 MS

TAB NO 152

ATLAS PHOTO NO 152

POD SEQUENCE NO 307

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				250.813		566.02505		-7.601		-27.072		2301.480		2.334		-68.459		115.857	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.759	-16.798	682.40450	-62.4	10.8	-83.4	27.6	11.14415	0.768	-90.8	71.4	34.1	39.8	36.3	0.	1-2			
3	-11.040	-17.856	659.60238	-63.9	9.7	-82.1	27.0	10.76027	0.809	-88.2	70.3	36.0	36.1	33.6	38.20792	2-3			
4	-10.990	-16.023	691.67999	-66.8	10.8	-82.2	25.6	11.28086	0.752	-88.0	72.1	32.3	41.2	39.2	54.51486	3-4			
5	-12.545	-15.627	709.77274	-61.1	12.1	-84.8	28.2	11.57857	0.724	-93.7	72.6	32.4	43.7	38.8	48.53615	4-5			
6	-12.521	-17.543	675.62272	-57.8	10.8	-84.4	29.5	11.01869	0.781	-93.4	70.7	36.1	38.8	33.1	56.66294	5-6			
7	-11.040	-17.856	659.60238	-63.9	9.7	-82.1	27.0	10.76027	0.809	-88.2	70.3	36.0	36.1	33.6	45.80250	6-7			
8	-10.451	-18.809	641.16884	-65.3	8.7	-81.2	26.5	10.42887	0.845	-86.1	69.3	38.0	32.6	30.9	33.49435	7-8			
9	-10.375	-17.105	668.76587	-68.3	9.8	-81.2	25.1	10.89774	0.793	-85.7	71.0	34.3	37.7	36.4	50.79571	8-9			
10	-10.292	-15.191	704.32583	-70.6	10.8	-81.1	23.7	11.44576	0.735	-85.3	72.8	30.5	43.0	42.0	57.09390	9-10			
11	-11.747	-14.804	719.93015	-65.3	12.0	-83.7	26.2	11.73044	0.709	-90.9	73.3	30.4	45.0	42.0	45.54252	10-11			
12	-13.441	-14.303	743.14977	-59.9	13.5	-86.6	28.8	12.08279	0.675	-97.0	73.9	30.7	47.8	41.3	53.39300	11-12			
13	-13.362	-16.407	702.70286	-56.7	12.1	-85.9	30.2	11.44527	0.736	-96.4	71.9	34.4	42.7	35.5	62.03211	12-13			
14	-13.303	-18.255	671.52730	-52.8	10.7	-85.3	31.6	10.90793	0.790	-95.8	70.1	38.1	38.1	29.9	54.50348	13-14			
15	-11.775	-18.564	653.34708	-58.9	9.6	-83.1	28.9	10.64563	0.821	-90.8	69.6	37.9	35.0	30.7	47.18210	14-15			
16	-10.451	-18.809	641.16884	-65.3	8.7	-81.2	26.5	10.42887	0.845	-86.1	69.3	38.0	32.6	30.9	40.75087	15-16			

JULY 31, 1964 13 HR 21 MIN 43 SEC 106 MS

TAB NO 153

ATLAS PHOTO NO 153

POD SEQUENCE NO 309

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				245.694		554.90030		-7.649		-26.972		2290.356		2.339		-68.390		115.842	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.740	-16.863	669.26624	-62.4	10.8	-83.3	27.6	10.92959	0.769	-90.8	71.3	34.1	39.7	36.2	0.	1-2			
3	-11.035	-17.899	646.94448	-63.9	9.7	-82.1	27.0	10.55378	0.809	-88.2	70.2	36.0	36.1	33.6	37.44837	2-3			
4	-10.986	-16.103	678.33310	-66.8	10.8	-82.2	25.6	11.06321	0.754	-88.0	72.0	32.3	41.1	39.1	53.42415	3-4			
5	-12.511	-15.716	696.03135	-61.1	12.0	-84.8	28.2	11.35440	0.725	-93.7	72.5	32.4	43.6	38.7	47.58090	4-5			
6	-12.487	-17.593	662.62717	-57.8	10.7	-84.4	29.5	10.80655	0.781	-93.4	70.7	36.1	38.7	33.1	55.49744	5-6			
7	-11.035	-17.899	646.94448	-63.9	9.7	-82.1	27.0	10.55378	0.809	-88.2	70.2	36.0	36.1	33.6	44.91203	6-7			
8	-10.457	-18.833	628.88397	-65.3	8.7	-81.2	26.5	10.22906	0.846	-86.1	69.3	38.0	32.6	30.9	32.84130	7-8			
9	-10.383	-17.163	655.92870	-68.2	9.8	-81.2	25.2	10.68825	0.794	-85.7	70.9	34.2	37.6	36.3	49.79779	8-9			
10	-10.302	-15.288	690.66637	-70.6	10.8	-81.1	23.8	11.22416	0.736	-85.3	72.7	30.5	42.9	41.9	55.93213	9-10			
11	-11.728	-14.910	705.95377	-65.3	12.0	-83.6	26.2	11.50272	0.710	-90.9	73.2	30.4	44.9	41.9	44.64764	10-11			
12	-13.388	-14.422	728.63322	-59.9	13.4	-86.6	28.8	11.84678	0.676	-97.0	73.8	30.7	47.7	41.2	52.31494	11-12			
13	-13.312	-16.481	689.11462	-56.7	12.1	-85.9	30.2	11.22358	0.737	-96.4	71.8	34.4	42.7	35.4	60.73371	12-13			
14	-13.254	-18.292	658.60888	-52.9	10.7	-85.3	31.5	10.69809	0.791	-95.8	70.1	38.1	38.0	29.8	53.41410	13-14			
15	-11.756	-18.594	640.81772	-59.0	9.6	-83.1	28.9	10.44148	0.821	-90.7	69.6	37.9	34.9	30.7	46.25968	14-15			
16	-10.457	-18.833	628.88397	-65.3	8.7	-81.2	26.5	10.22906	0.846	-86.1	69.3	38.0	32.6	30.9	39.96635	15-16			

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TAB NO 154

ATLAS PHOTO NO 154

POD SEQUENCE NO 311

JULY 31, 1964 13 HR 21 MIN 48 SEC 226 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				240.574		543.76007		-7.697		-26.871		2279.215		2.343		-68.322		115.827	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.722	-16.929	656.09857	-62.4	10.8	-83.3	27.6	10.71455	0.770	-90.8	71.2	34.1	39.7	36.1	0.	1	2		
3	-11.031	-17.944	634.25599	-63.9	9.7	-82.1	27.0	10.34679	0.810	-88.2	70.2	36.0	36.0	33.5	36.68847	2	3		
4	-10.983	-16.184	664.95480	-66.8	10.8	-82.2	25.7	10.64503	0.755	-88.0	71.9	32.3	41.0	39.1	52.33079	4	5		
5	-12.478	-15.806	682.26307	-61.1	12.0	-84.8	28.2	11.12980	0.726	-93.7	72.4	32.4	43.5	38.6	46.62598	4	5		
6	-12.455	-17.644	649.60555	-57.8	10.7	-84.3	29.5	10.59459	0.782	-93.4	70.6	36.1	38.6	33.0	54.35019	5	6		
7	-11.031	-17.944	634.25599	-63.9	9.7	-82.1	27.0	10.34679	0.810	-88.2	70.2	36.0	36.0	33.5	44.02149	6	7		
8	-10.465	-18.859	616.56843	-65.3	8.7	-81.2	26.6	10.02874	0.846	-86.1	69.2	38.0	32.6	30.9	32.18720	7	8		
9	-10.392	-17.223	643.03823	-68.2	9.8	-81.2	25.2	10.47821	0.794	-85.7	70.8	34.3	37.6	36.2	48.79677	8	9		
10	-10.312	-15.386	677.01217	-70.6	10.8	-81.1	23.9	11.00198	0.731	-85.3	72.6	30.5	42.8	41.8	54.76781	9	10		
11	-11.710	-15.017	691.94758	-65.2	11.9	-83.6	26.2	11.27451	0.711	-90.9	73.1	30.4	44.8	41.8	43.75270	10	11		
12	-13.337	-14.541	714.09492	-59.9	13.4	-86.6	28.8	11.61041	0.678	-97.0	73.7	30.7	47.5	41.1	51.23894	11	12		
13	-13.263	-16.556	675.50308	-56.7	12.0	-85.8	30.2	11.00230	0.738	-96.4	71.7	34.4	42.6	35.3	59.43539	12	13		
14	-13.207	-18.329	645.66419	-52.9	10.6	-85.3	31.5	10.48790	0.791	-95.8	70.0	38.1	38.0	29.8	52.32296	13	14		
15	-11.738	-16.624	628.26103	-59.0	9.6	-83.1	28.9	10.23689	0.822	-90.7	69.6	37.9	34.9	30.7	45.33760	14	15		
16	-10.465	-18.859	616.56843	-65.3	8.7	-81.2	26.6	10.02874	0.846	-86.1	69.2	38.0	32.6	30.9	39.18122	15	16		

TAB NO 155

ATLAS PHOTO NO 155

POD SEQUENCE NO 313

JULY 31, 1964 13 HR 21 MIN 53 SEC 346 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ		
				235.454			532.60358	-7.746	-26.770	2268.059	2.348	-68.252	115.811		
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.704	-16.995	642.96199	-62.4	10.7	-83.3	27.6	10.49904	0.770	-90.8	71.2	34.1	39.6	36.1	0.
3	-11.028	-17.989	621.53815	-63.9	9.7	-82.1	27.0	10.13932	0.810	-88.2	70.1	36.0	36.0	33.5	35.92778
4	-10.980	-16.266	651.54794	-66.8	10.7	-82.2	25.7	10.62638	0.756	-88.0	71.8	32.3	41.0	39.0	51.23642
5	-12.444	-15.897	688.46766	-61.1	11.9	-84.7	28.2	10.90476	0.727	-93.7	72.3	32.4	43.4	38.6	45.67001
6	-12.422	-17.646	636.55527	-57.8	10.7	-84.3	29.5	10.38175	0.782	-93.4	70.6	36.1	38.6	33.0	53.20247
7	-11.028	-17.989	621.53815	-63.9	9.7	-82.1	27.0	10.13932	0.810	-88.2	70.1	36.0	36.0	33.5	43.12936
8	-10.473	-18.885	604.22375	-65.2	8.7	-81.2	26.6	9.82755	0.846	-86.1	69.2	38.0	32.6	30.8	31.53200
9	-10.401	-17.282	630.11844	-68.2	9.8	-81.1	25.3	10.26770	0.795	-85.7	70.8	34.3	37.5	36.2	47.79396
10	-10.323	-15.485	663.31039	-70.5	10.8	-81.1	23.9	10.77936	0.738	-85.3	72.5	30.5	42.7	41.7	53.60327
11	-11.692	-15.174	677.91493	-65.2	11.9	-83.6	26.3	11.04587	0.712	-90.9	73.0	30.4	44.7	41.7	42.85657
12	-13.285	-14.660	699.53348	-59.9	13.3	-86.5	28.8	11.37366	0.680	-97.0	73.6	30.7	47.4	40.9	50.16301
13	-13.214	-16.631	661.86446	-56.7	12.0	-85.8	30.1	10.78018	0.739	-96.4	71.7	34.4	42.5	35.2	58.13864
14	-13.159	-18.367	632.69364	-52.9	10.6	-85.3	31.4	10.27725	0.792	-95.8	70.0	38.1	37.9	29.8	51.23087
15	-11.720	-16.655	615.67534	-59.0	9.6	-83.1	28.9	10.03182	0.822	-90.7	69.6	37.9	34.9	30.6	44.41463
16	-10.473	-18.885	604.22375	-65.2	8.7	-81.2	26.6	9.82755	0.846	-86.1	69.2	38.0	32.6	30.8	38.39448

TAB NO 156

ATLAS PHOTO NO 156

POD SEQUENCE NO 315

JULY 31, 1964 13 HR 21 MIN 58 SEC 466 MS

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LCN	R	V	PTH	AZ		
				230.334				521.43121	-7.795	-26.667	2256.887	2.352	-68.182	115.796		
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-P
2	-11.686	-17.062	629.67712	-62.4	10.7	-83.3	27.6	10.28307	0.771	-90.8	71.1	34.1	39.5	36.0	0.	1-2
3	-11.024	-18.034	608.79160	-63.9	9.7	-82.1	27.0	9.93139	0.811	-88.2	70.1	36.0	35.9	33.4	35.16632	2-3
4	-10.977	-16.348	638.11362	-66.7	10.7	-82.2	25.7	10.40729	0.757	-88.0	71.7	32.3	40.9	38.9	50.14140	3-4
5	-12.411	-15.988	654.64558	-61.1	11.9	-84.7	28.2	10.67928	0.728	-93.7	72.2	32.4	43.3	38.5	44.71280	4-5
6	-12.390	-17.747	623.47641	-57.8	10.7	-84.3	29.5	10.16846	0.783	-93.4	70.5	36.1	38.5	32.9	52.05457	5-6
7	-11.024	-18.034	608.79160	-63.9	9.7	-82.1	27.0	9.93139	0.811	-88.2	70.1	36.0	35.9	33.4	42.23567	6-7
8	-10.480	-18.912	591.85065	-65.2	8.7	-81.2	26.6	9.62670	0.846	-86.1	69.2	38.0	32.6	30.8	30.87553	7-8
9	-10.410	-17.343	617.17051	-68.1	9.6	-81.1	25.3	10.05673	0.795	-85.7	70.7	34.3	37.4	36.1	46.78989	8-9
10	-10.333	-15.584	649.58279	-70.5	10.7	-81.0	24.0	10.55631	0.739	-85.3	72.4	30.5	42.6	41.6	52.43886	9-10
11	-11.674	-15.232	663.85699	-65.2	11.9	-83.5	26.3	10.81682	0.714	-90.9	72.9	30.4	44.6	41.6	41.95927	10-11
12	-13.234	-14.780	684.94926	-59.9	13.3	-86.5	28.8	11.13655	0.681	-97.0	73.5	30.7	47.3	40.8	49.08679	11-12
13	-13.164	-16.706	648.19867	-56.8	11.9	-85.8	30.1	10.55762	0.740	-96.4	71.6	34.4	42.4	35.2	56.84366	12-13
14	-13.111	-18.405	619.69468	-53.0	10.6	-85.3	31.4	10.06613	0.793	-95.8	69.9	38.1	37.9	29.7	50.13807	13-14
15	-11.702	-16.687	603.66079	-59.0	9.6	-83.1	28.9	9.82628	0.823	-90.7	69.5	37.9	34.8	30.6	43.48953	14-15
16	-10.480	-18.912	591.85065	-65.2	8.7	-81.2	26.6	9.62670	0.846	-86.1	69.2	38.0	32.6	30.8	37.60598	15-16

RA-VII CAMERA FB

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JULY 31, 1964 13 HR 22 MIN 3 SEC 585 MS TAB NO 157 ATLAS PHOTO NO 157 POD SEQUENCE NO 317

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				225.214	510.24249	-7.845	-26.563	2245.698	2.357	-68.111	115.780					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.658	-17.130	616.39197	-62.4	10.7	-83.3	27.6	10.06612	0.772	-90.8	71.0	34.2	39.5	35.9	0.	1- 2
3	-11.019	-18.081	595.98881	-63.8	9.6	-82.1	27.1	9.72253	0.811	-88.2	70.1	36.0	35.9	33.4	34.40042	2- 3
4	-10.974	-16.433	624.61704	-66.7	10.7	-82.1	25.8	10.18717	0.758	-88.0	71.7	32.3	40.8	38.8	49.03977	3- 4
5	-12.377	-16.081	640.75940	-61.1	11.9	-84.7	28.2	10.45276	0.730	-93.7	72.1	32.4	43.2	38.4	43.75104	4- 5
6	-12.356	-17.801	610.33952	-57.8	10.6	-84.3	29.5	9.95421	0.784	-93.4	70.5	36.1	38.5	32.9	50.89996	5- 6
7	-11.019	-16.081	595.98881	-63.8	9.6	-82.1	27.1	9.72253	0.811	-88.2	70.1	36.0	35.9	33.4	41.33798	6- 7
8	-10.487	-18.940	579.42525	-65.2	8.7	-81.2	26.7	9.42460	0.846	-86.1	69.2	38.0	32.5	30.8	30.21498	7- 8
9	-10.418	-17.405	604.16434	-68.1	9.8	-81.1	25.4	9.84481	0.796	-85.7	70.7	34.3	37.4	36.1	45.77957	8- 9
10	-10.343	-15.686	635.79119	-70.4	10.7	-81.0	24.1	10.33223	0.740	-85.3	72.3	30.5	42.5	41.5	51.26792	9-10
11	-11.656	-15.342	649.73295	-65.2	11.8	-83.5	26.3	10.58668	0.715	-90.9	72.8	30.4	44.5	41.5	41.05755	10-11
12	-13.182	-14.902	670.29783	-59.9	13.2	-86.4	28.8	10.89834	0.683	-97.0	73.3	30.7	47.2	40.7	48.00635	11-12
13	-13.114	-16.784	634.47107	-56.8	11.9	-85.8	30.1	10.33405	0.741	-96.4	71.5	34.4	42.3	35.1	55.54221	12-13
14	-13.063	-18.445	606.64010	-53.0	10.5	-85.3	31.3	9.89411	0.793	-95.8	69.9	38.1	37.8	29.7	49.03865	13-14
15	-11.683	-18.720	590.39211	-59.0	9.5	-83.1	28.9	9.61966	0.823	-90.7	69.5	37.9	34.8	30.6	42.56090	14-15
16	-10.487	-18.940	579.42525	-65.2	8.7	-81.2	26.7	9.42460	0.846	-86.1	69.2	38.0	32.5	30.8	36.81378	15-16

JULY 31, 1964 13 HR 22 MIN 8 SEC 705 MS TAB NO 158 ATLAS PHOTO NO 158 POD SEQUENCE NO 319

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				220.094	499.03702	-7.895	-26.458	2234.492	2.361	-68.040	115.763					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.649	-17.200	603.07657	-62.4	10.7	-83.3	27.6	9.84867	0.773	-90.8	71.0	34.2	39.4	35.8	0.	1- 2
3	-11.015	-18.129	583.15543	-63.8	9.6	-82.1	27.1	9.51318	0.812	-88.2	70.0	36.0	35.8	33.3	33.63352	2- 3
4	-10.970	-16.517	611.09109	-66.7	10.7	-82.1	25.8	9.96658	0.759	-88.0	71.6	32.3	40.7	38.7	47.93737	3- 4
5	-12.342	-16.175	626.84455	-61.1	11.8	-84.7	28.2	10.22576	0.731	-93.7	72.0	32.4	43.1	38.3	42.78793	4- 5
6	-12.323	-17.856	597.17204	-57.8	10.6	-84.3	29.4	9.73947	0.785	-93.4	70.4	36.1	38.4	32.8	49.74504	5- 6
7	-11.015	-18.129	583.15543	-63.8	9.6	-82.1	27.1	9.51318	0.812	-88.2	70.0	36.0	35.8	33.3	40.43825	6- 7
8	-10.494	-18.969	566.96957	-65.1	8.7	-81.2	26.7	9.22201	0.847	-86.1	69.1	38.0	32.5	30.7	29.55321	7- 8
9	-10.427	-17.467	591.12807	-68.0	9.8	-81.1	25.4	9.63240	0.797	-85.7	70.6	34.3	37.3	36.0	44.76777	8- 9
10	-10.353	-15.788	621.97177	-70.4	10.7	-81.0	24.2	10.10769	0.741	-85.3	72.2	30.5	42.4	41.4	50.09702	9-10
11	-11.637	-15.452	635.58155	-65.1	11.8	-83.5	26.4	10.35611	0.716	-90.9	72.7	30.4	44.4	41.4	40.15447	10-11
12	-13.129	-15.025	655.62152	-59.9	13.2	-86.4	28.8	10.65972	0.685	-97.0	73.2	30.7	47.0	40.5	46.92559	11-12
13	-13.064	-16.862	620.71431	-56.8	11.8	-85.8	30.1	10.11001	0.742	-96.4	71.4	34.4	42.2	35.0	54.26239	12-13
14	-13.014	-18.486	593.55520	-53.0	10.5	-85.3	31.3	9.64160	0.794	-95.8	69.9	38.1	37.8	29.7	47.93838	13-14
15	-11.665	-18.754	577.69270	-59.0	9.5	-83.1	28.9	9.41294	0.823	-90.7	69.5	37.9	34.8	30.5	41.63052	14-15
16	-10.494	-18.969	566.96957	-65.1	8.7	-81.2	26.7	9.22201	0.847	-86.1	69.1	38.0	32.5	30.7	36.01982	15-16

JULY 31, 1964 13 HR 22 MIN 13 SEC 825 MS TAB NO 159 ATLAS PHOTO NO 159 POD SEQUENCE NO 321

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
PHOTO DATA				214.974	487.81564	-7.946	-26.352	2223.271	2.366	-67.968	115.747					
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.631	-17.269	569.73415	-62.3	10.7	-83.2	27.7	9.63077	0.774	-90.8	70.9	34.2	39.3	35.8	0.	1- 2
3	-11.010	-18.177	570.29429	-63.8	9.6	-82.1	27.1	9.30337	0.812	-88.2	70.0	36.0	35.8	33.3	32.86619	2- 3
4	-10.966	-16.602	597.53921	-66.6	10.7	-82.1	25.9	9.74557	0.760	-88.0	71.5	32.3	40.6	38.6	46.83468	3- 4
5	-12.308	-16.269	612.90472	-61.1	11.8	-84.6	28.2	9.99836	0.732	-93.7	71.9	32.4	43.0	38.2	41.82362	4- 5
6	-12.289	-17.911	583.97710	-57.8	10.6	-84.3	29.4	9.52428	0.785	-93.4	70.3	36.1	38.3	32.8	48.59035	5- 6
7	-11.010	-18.177	570.29429	-63.8	9.6	-82.1	27.1	9.30337	0.812	-88.2	70.0	36.0	35.8	33.3	39.53707	6- 7
8	-10.501	-18.998	554.48618	-65.1	8.7	-81.2	26.7	9.01896	0.847	-86.1	69.1	38.0	32.5	30.7	28.89042	7- 8
9	-10.435	-17.530	578.06483	-68.0	9.7	-81.1	25.5	9.41955	0.797	-85.7	70.5	34.3	37.3	35.9	43.75487	8- 9
10	-10.363	-15.890	608.12828	-70.3	10.7	-81.0	24.2	9.88276	0.743	-85.3	72.1	30.5	42.3	41.3	48.92672	9-10
11	-11.618	-15.563	621.40678	-65.1	11.8	-83.4	26.4	10.12515	0.718	-90.9	72.6	30.4	44.2	41.2	39.25035	10-11
12	-13.076	-15.147	640.92461	-59.9	13.1	-86.3	28.8	10.42078	0.686	-97.0	73.1	30.7	46.9	40.4	45.84466	11-12
13	-13.013	-16.940	606.93185	-56.8	11.8	-85.8	30.0	9.88555	0.743	-96.3	71.4	34.4	42.1	34.9	52.94491	12-13
14	-12.965	-18.527	580.44286	-53.0	10.5	-85.3	31.3	9.42865	0.795	-95.8	69.8	38.1	37.7	29.6	46.83775	13-14
15	-11.646	-18.788	564.96523	-59.0	9.5	-83.1	28.9	9.20556	0.824	-90.7	69.4	37.9	34.7	30.5	40.69882	14-15
16	-10.501	-18.998	554.48618	-65.1	8.7	-81.2	26.7	9.01896	0.847	-86.1	69.1	38.0	32.5	30.7	35.22412	15-16

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JULY 31, 1964 13 HR 22 MIN 18 SEC 945 MS

TAB NO 160 ATLAS PHOTO NO 160 POD SEQUENCE NO 323

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				209.854		476.57742	-7.997	-26.245	2212.033	2.371	-67.895	115.730				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.612	-17.338	576.37039	-62.3	10.6	-83.2	27.7	9.41254	0.774	-90.8	70.8	34.2	39.3	35.7	0.	1-2
3	-11.005	-18.225	557.41013	-63.8	9.6	-82.0	27.1	9.09319	0.813	-88.2	69.9	36.1	35.7	33.2	32.09902	2-3
4	-10.962	-16.688	583.96777	-66.6	10.7	-82.1	25.9	9.52424	0.761	-88.0	71.4	32.3	40.5	38.5	45.73296	3-4
5	-12.273	-16.363	598.94678	-61.1	11.8	-84.6	28.2	9.77067	0.733	-93.7	71.8	32.4	42.9	38.1	40.85883	4-5
6	-12.255	-17.965	570.75974	-57.8	10.6	-84.3	29.4	9.30872	0.786	-93.4	70.3	36.1	38.3	32.7	47.43725	5-6
7	-11.005	-18.225	557.41013	-63.8	9.6	-82.0	27.1	9.09319	0.813	-88.2	69.9	36.1	35.7	33.2	38.63484	6-7
8	-10.508	-19.027	541.97904	-65.1	8.7	-81.1	26.8	8.81553	0.847	-86.1	69.1	38.0	32.4	30.7	28.22721	7-8
9	-10.443	-17.593	564.97996	-67.9	9.7	-81.1	25.5	9.20635	0.798	-85.7	70.5	34.3	37.2	35.9	42.74194	8-9
10	-10.373	-15.992	534.26786	-70.4	10.7	-80.9	25.3	9.65755	0.744	-85.3	72.0	30.6	42.2	41.2	47.75842	9-10
11	-11.599	-15.674	607.21623	-65.1	11.8	-83.4	26.4	9.89393	0.719	-90.9	72.5	30.4	44.1	41.1	38.34564	10-11
12	-13.024	-15.270	626.21535	-59.9	13.0	-86.3	28.8	10.18163	0.688	-97.0	73.0	30.7	46.8	40.3	44.76448	11-12
13	-12.963	-17.019	593.12984	-56.8	11.7	-85.7	30.0	9.66076	0.745	-96.3	71.3	34.4	42.0	34.8	51.65147	12-13
14	-12.916	-18.567	567.30765	-53.1	10.4	-85.3	31.2	9.21532	0.795	-95.8	69.8	38.1	37.6	29.6	45.73793	13-14
15	-11.627	-18.822	552.21394	-59.0	9.5	-83.1	28.9	8.99779	0.824	-90.7	69.4	37.9	34.7	30.4	39.76591	14-15
16	-10.508	-19.027	541.97904	-65.1	8.7	-81.1	26.8	8.81553	0.847	-86.1	69.1	38.0	32.4	30.7	34.42712	15-16

JULY 31, 1964 13 HR 22 MIN 24 SEC 65 MS

TAB NO 161 ATLAS PHOTO NO 161 POD SEQUENCE NO 325

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				204.734			465.32236	-8.048	-26.137	2200.778	2.376	-67.822	115.713			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.592	-17.408	562.97781	-62.3	10.6	-83.2	27.7	9.19382	0.775	-90.8	70.8	34.2	39.2	35.6	0.	1-2
3	-11.000	-18.273	544.49648	-63.7	9.6	-82.0	27.2	8.88253	0.813	-88.2	69.9	36.1	35.7	33.2	31.33126	2-3
4	-10.956	-16.773	570.36851	-66.5	10.7	-82.0	26.0	9.30245	0.762	-88.0	71.3	32.3	40.5	38.4	44.63073	3-4
5	-12.238	-16.457	586.96190	-61.1	11.7	-84.6	28.2	9.54253	0.734	-93.7	71.8	32.4	42.8	38.0	39.89273	4-5
6	-12.221	-18.020	557.51312	-57.8	10.5	-84.3	29.4	9.09269	0.787	-93.4	70.2	36.1	38.2	32.6	46.28416	5-6
7	-11.000	-18.273	544.49648	-63.7	9.6	-82.0	27.2	8.88253	0.813	-88.2	69.9	36.1	35.7	33.2	37.73088	6-7
8	-10.514	-19.056	529.44251	-65.0	8.7	-81.1	26.8	8.61162	0.847	-86.1	69.1	38.0	32.4	30.6	27.56285	7-8
9	-10.451	-17.657	551.86628	-67.9	9.7	-81.0	25.6	8.99268	0.799	-85.7	70.4	34.3	37.1	35.8	41.72776	8-9
10	-10.382	-16.094	580.38139	-70.2	10.7	-80.9	24.4	9.43192	0.745	-85.3	72.0	30.6	42.1	41.1	46.59052	9-10
11	-11.580	-15.785	593.00022	-65.1	11.7	-83.4	26.5	9.66230	0.721	-90.9	72.3	30.4	44.0	41.0	37.43968	10-11
12	-12.971	-15.392	611.48335	-59.9	13.0	-86.2	28.8	9.94211	0.690	-97.0	72.9	30.7	46.6	40.1	43.68421	11-12
13	-12.912	-17.097	579.30022	-56.8	11.7	-85.7	30.0	9.43553	0.746	-96.3	71.2	34.4	41.9	34.7	50.12607	12-13
14	-12.866	-18.608	565.14326	-53.1	10.4	-85.3	31.2	9.00151	0.796	-95.8	69.7	38.1	37.6	29.5	44.63753	13-14
15	-11.607	-18.856	539.43286	-59.0	9.5	-83.1	28.9	8.78954	0.825	-90.7	69.4	37.9	34.6	30.4	38.83169	14-15
16	-10.514	-19.056	529.44251	-65.0	8.7	-81.1	26.8	8.61162	0.847	-86.1	69.1	38.0	32.4	30.6	33.62808	15-16

JULY 31, 1964 13 HR 22 MIN 29 SEC 185 MS

TAB NO 162 ATLAS PHOTO NO 162 POD SEQUENCE NO 327

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				197.614	454.05048	-8.101	-26.028	2189.506	2.381	-67.748	115.696					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZ/SUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.573	-17.479	549.55523	-62.3	10.6	-83.2	27.7	8.97462	0.776	-90.8	70.7	34.2	39.1	35.5	0.	1-2
3	-10.995	-18.322	531.55233	-63.7	9.6	-82.0	27.2	8.67137	0.814	-88.2	69.8	36.1	35.6	33.1	30.56262	2-3
4	-10.954	-16.859	556.74020	-66.5	10.7	-82.0	26.0	9.08019	0.763	-88.0	71.2	32.3	40.4	38.4	43.52785	3-4
5	-12.203	-16.551	570.34884	-61.1	11.7	-84.5	28.2	9.31394	0.736	-93.7	71.7	32.4	42.7	37.9	38.92528	4-5
6	-12.187	-18.076	544.23617	-57.9	10.5	-84.3	29.4	8.87616	0.787	-93.4	70.2	36.1	38.1	32.6	45.13089	5-6
7	-10.995	-18.322	531.55233	-63.7	9.6	-82.0	27.2	8.67137	0.814	-88.2	69.8	36.1	35.6	33.1	36.82506	6-7
8	-10.521	-19.086	516.87564	-65.0	8.7	-81.1	26.8	8.40722	0.848	-86.1	69.0	38.0	32.4	30.6	26.89741	7-8
9	-10.459	-17.721	538.72722	-67.9	9.7	-81.0	25.6	8.77852	0.799	-85.7	70.4	34.3	37.1	35.7	40.71220	8-9
10	-10.392	-16.197	566.46757	-70.2	10.7	-80.9	24.4	9.20584	0.746	-85.3	71.9	30.6	42.0	41.0	45.42282	9-10
11	-11.561	-15.896	578.75741	-65.0	11.7	-83.3	26.5	9.43024	0.722	-90.9	72.2	30.4	43.9	40.9	36.53245	10-11
12	-12.917	-15.515	596.72710	-59.9	12.9	-86.2	28.8	9.70219	0.691	-97.0	72.7	30.7	46.5	40.0	42.60353	11-12
13	-12.860	-17.176	565.44106	-56.8	11.6	-85.7	30.0	9.20983	0.747	-96.3	71.1	34.4	41.8	34.6	49.07043	12-13
14	-12.816	-18.650	540.94873	-53.1	10.4	-85.3	31.1	8.78721	0.797	-95.8	69.7	38.1	37.5	29.5	43.53642	13-14
15	-11.588	-18.891	526.62109	-59.0	9.5	-83.1	28.9	8.58079	0.825	-90.7	69.3	37.9	34.6	30.4	37.89572	14-15
16	-10.521	-19.086	516.87564	-65.0	8.7	-81.1	26.8	8.40722	0.848	-86.1	69.0	38.0	32.4	30.6	32.82737	15-16

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JULY 31, 1964 13 HR 22 MIN 34 SEC 305 MS

TAB NO 163

ATLAS PHOTO NO 163

POD SEQUENCE NO 329

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				194.495		442.76205		-8.153		-25.917		2178.217		2.385		-67.673		115.678	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.554	-17.550	536.09190	-62.3	10.6	-83.2	27.7	8.75476	0.777	-90.8	70.6	34.2	39.0	35.5	0.	1-2			
3	-10.990	-18.372	518.56837	-63.7	9.6	-82.0	27.2	8.45956	0.814	-88.2	69.8	36.1	35.6	33.1	29.79199	2-3			
4	-10.950	-16.946	543.07104	-66.5	10.6	-82.0	25.1	8.45726	0.764	-88.0	71.2	32.3	40.3	38.3	42.42232	3-4			
5	-12.168	-16.647	556.89507	-61.0	11.7	-84.5	28.2	9.08468	0.737	-93.7	71.6	32.4	42.5	37.8	37.95540	4-5			
6	-12.152	-18.132	530.91909	-57.9	10.5	-84.3	29.4	8.65897	0.788	-93.4	70.1	36.1	38.1	32.5	43.97526	5-6			
7	-10.990	-18.372	518.56837	-63.7	9.6	-82.0	27.2	8.45956	0.814	-88.2	69.8	36.1	35.6	33.1	35.91684	6-7			
8	-10.527	-19.117	504.27039	-64.9	8.7	-81.1	26.9	8.20220	0.846	-86.1	69.0	38.0	32.4	30.6	26.22969	7-8			
9	-10.467	-17.786	525.53902	-67.8	9.7	-81.0	25.7	8.56370	0.800	-85.7	70.3	34.3	37.0	35.7	39.69358	8-9			
10	-10.401	-16.301	552.51531	-70.1	10.7	-80.9	24.5	8.97910	0.747	-85.3	71.8	30.6	41.9	40.9	44.25297	9-10			
11	-11.541	-16.006	564.47406	-65.0	11.7	-83.3	26.6	9.19751	0.723	-90.9	72.1	30.4	43.8	40.8	35.62275	10-11			
12	-12.864	-15.639	581.93188	-59.9	12.9	-86.2	28.8	9.46164	0.693	-97.0	72.6	30.7	46.4	39.9	41.52132	11-12			
13	-12.809	-17.256	551.54329	-56.8	11.6	-85.7	27.9	8.98347	0.746	-96.3	71.0	34.4	41.7	34.6	47.77977	12-13			
14	-12.766	-18.692	527.71513	-53.2	10.3	-85.3	31.0	8.57228	0.797	-95.8	69.6	38.1	37.4	29.4	42.43260	13-14			
15	-11.568	-18.927	513.77021	-59.0	9.4	-83.1	28.9	8.37140	0.825	-90.7	69.3	37.9	34.5	30.3	36.97749	14-15			
16	-10.527	-19.117	504.27039	-64.9	8.7	-81.1	26.9	8.20220	0.846	-86.1	69.0	38.0	32.4	30.6	32.02410	15-16			

JULY 31, 1964 13 HR 22 MIN 39 SEC 425 MS

TAB NO 164

ATLAS PHOTO NO 164

POD SEQUENCE NO 331

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				197.375		431.45590		-8.206		-25.805		2166.911		2.390		-67.597		115.661	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.534	-17.622	522.59891	-62.3	10.6	-83.2	27.7	8.53441	0.778	-90.8	70.6	34.2	39.0	35.4	0.	1-2			
3	-10.985	-18.422	505.55394	-63.7	9.6	-82.0	27.2	8.24725	0.815	-88.2	69.7	36.1	35.5	33.0	29.02079	2-3			
4	-10.945	-17.033	529.37329	-66.4	10.6	-82.0	25.1	8.63386	0.765	-88.0	71.1	32.3	40.2	38.2	41.31635	3-4			
5	-12.132	-16.743	542.81366	-61.0	11.6	-84.5	28.2	8.05497	0.738	-93.7	71.5	32.4	42.5	37.6	36.98430	4-5			
6	-12.118	-18.189	517.57165	-57.9	10.4	-84.2	29.4	8.44129	0.785	-93.3	70.1	36.1	38.0	32.5	42.81971	5-6			
7	-10.985	-18.422	505.55394	-63.7	9.6	-82.0	27.2	8.24725	0.815	-88.2	69.7	36.1	35.5	33.0	35.00680	6-7			
8	-10.533	-19.148	491.63467	-64.9	8.7	-81.1	26.9	7.99667	0.846	-86.1	69.0	38.0	32.3	30.5	25.56097	7-8			
9	-10.474	-17.851	512.32563	-67.8	9.7	-81.0	25.7	8.34840	0.801	-85.7	70.2	34.3	36.9	35.6	38.67375	8-9			
10	-10.410	-16.406	538.53233	-70.1	10.7	-80.6	24.6	8.75193	0.748	-85.3	71.6	30.6	41.8	40.8	43.08361	9-10			
11	-11.522	-16.121	550.16463	-65.0	11.7	-83.3	26.6	8.96436	0.725	-90.9	72.0	30.4	43.7	40.7	34.71200	10-11			
12	-12.810	-15.764	567.11332	-59.9	12.8	-86.1	28.8	9.22071	0.695	-97.0	72.5	30.7	46.2	39.7	40.43875	11-12			
13	-12.757	-17.337	537.61636	-56.8	11.6	-85.7	27.9	8.75665	0.749	-96.3	70.9	34.4	41.6	34.5	46.49121	12-13			
14	-12.716	-18.735	514.45137	-53.2	10.3	-85.3	31.0	8.35666	0.798	-95.8	69.6	38.1	37.4	29.4	41.32827	13-14			
15	-11.548	-18.963	500.88855	-59.0	9.4	-83.1	28.9	8.16150	0.826	-90.7	69.2	37.9	34.5	30.3	36.01756	14-15			
16	-10.533	-19.148	491.63467	-64.9	8.7	-81.1	26.9	7.99667	0.846	-86.1	69.0	38.0	32.3	30.5	31.21918	15-16			

JULY 31, 1964 13 HR 22 MIN 44 SEC 545 MS

TAB NO 165

ATLAS PHOTO NO 165

POD SEQUENCE NO 333

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				184.255		420.13290		-8.260		-25.692		2155.588		2.395		-67.521		115.643	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.514	-17.693	509.08492	-62.2	10.5	-83.1	27.8	8.31372	0.778	-90.8	70.5	34.2	38.9	35.3	0.	1-2			
3	-10.979	-18.472	492.51667	-63.6	9.6	-82.0	27.3	8.03457	0.815	-88.2	69.7	36.1	35.5	33.0	28.24995	2-3			
4	-10.940	-17.120	515.65643	-66.4	10.6	-82.0	26.2	8.41016	0.766	-88.0	71.0	32.3	40.1	38.1	40.21150	3-4			
5	-12.097	-16.839	528.71465	-61.0	11.6	-84.5	28.2	8.62497	0.739	-93.7	71.4	32.4	42.4	37.5	36.01264	4-5			
6	-12.083	-18.246	504.20240	-57.9	10.4	-84.2	29.4	8.22326	0.790	-93.3	70.0	36.1	37.9	32.4	41.66590	5-6			
7	-10.979	-18.472	492.51667	-63.6	9.6	-82.0	27.3	8.03457	0.815	-88.2	69.7	36.1	35.5	33.0	34.09573	6-7			
8	-10.539	-19.179	478.97521	-64.9	8.7	-81.1	26.9	7.79076	0.849	-86.1	68.9	38.0	32.3	30.5	24.89186	7-8			
9	-10.482	-17.916	499.09067	-67.7	9.7	-81.0	25.8	8.13275	0.801	-85.7	70.2	34.3	36.9	35.5	37.65399	8-9			
10	-10.419	-16.510	524.53497	-70.0	10.7	-80.8	24.7	8.52448	0.750	-85.3	71.5	30.6	41.7	40.7	41.91639	9-10			
11	-11.502	-16.234	535.84008	-65.0	11.6	-83.3	26.6	8.73056	0.726	-90.9	71.9	30.5	43.6	40.5	33.80077	10-11			
12	-12.756	-15.888	552.26307	-59.9	12.8	-86.1	28.8	8.97960	0.697	-97.0	72.4	30.7	46.1	39.6	39.35688	11-12			
13	-12.705	-17.417	523.67031	-56.8	11.5	-85.6	27.9	8.52952	0.750	-96.3	70.9	34.4	41.5	34.4	45.20675	12-13			
14	-12.665	-18.777	501.16469	-53.2	10.3	-85.3	31.0	8.14106	0.799	-95.8	69.5	38.1	37.3	29.3	40.22493	13-14			
15	-11.528	-18.999	487.98309	-58.9	9.4	-83.1	28.9	7.95123	0.826	-90.7	69.2	37.9	34.5	30.2	35.07672	14-15			
16	-10.539	-19.179	478.97521	-64.9	8.7	-81.1	26.9	7.79076	0.849	-86.1	68.9	38.0	32.3	30.5	30.41279	15-16			

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JULY 31, 1964 13 HR 22 MIN 49 SEC 665 MS TAB NO 166 ATLAS PHOTO NO 166 POD SEQUENCE NO 335

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
				179.135	408.79272	-8.314	-25.578	2144.248	2.400	-67.444	115.624	
PHOTO DATA												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE PT-PT
2	-11.494	-17.763	495.58917	-62.2	10.5	-83.1	27.8	8.09326	0.779	-90.8	70.4 34.2 38.8	35.2 0. 1-2
3	-10.973	-18.520	479.48703	-63.6	9.6	-82.0	27.3	7.82201	0.816	-88.2	69.6 36.1 35.4	32.9 27.48336 2-3
4	-10.935	-17.205	501.95907	-66.4	10.6	-81.9	26.2	8.18676	0.766	-88.0	70.9 32.3 40.0	38.0 39.11426 3-4
5	-12.061	-16.932	514.63901	-61.0	11.5	-84.4	28.2	8.39536	0.740	-93.7	71.3 32.4 42.3	37.5 35.04368 4-5
6	-12.047	-18.300	490.84298	-57.9	10.4	-84.2	29.3	8.00538	0.790	-93.3	69.9 36.1 37.9	32.3 40.52092 5-6
7	-10.973	-18.520	479.48703	-63.6	9.6	-82.0	27.3	7.82201	0.816	-88.2	69.6 36.1 35.4	32.9 33.18598 6-7
8	-10.545	-19.208	466.31854	-64.8	8.7	-81.1	26.9	7.58490	0.849	-86.1	68.9 38.0 32.3	30.5 24.22556 7-8
9	-10.489	-17.979	485.66834	-67.7	9.7	-80.9	25.8	7.91730	0.802	-85.7	70.1 34.3 36.8	35.5 36.63972 8-9
10	-10.428	-16.612	510.56381	-70.0	10.7	-80.8	24.7	8.29746	0.751	-85.2	71.5 30.6 41.6	40.6 32.89223 9-10
11	-11.481	-16.344	521.34517	-64.9	11.6	-83.2	26.7	8.49864	0.727	-90.9	71.8 30.5 41.5	40.4 38.26004 10-11
12	-12.702	-16.009	537.48919	-59.9	12.7	-86.0	28.8	8.73907	0.698	-97.0	72.2 30.7 46.0	39.5 39.12887 11-12
13	-12.653	-17.495	509.74271	-56.9	11.5	-85.6	29.9	8.50218	0.751	-96.3	70.8 34.4 41.4	34.3 33.13729 12-13
14	-12.615	-18.818	487.88510	-53.2	10.2	-85.3	31.0	7.92537	0.799	-95.8	69.5 38.1 37.2	29.3 34.13729 13-14
15	-11.507	-19.033	475.08160	-59.0	9.4	-83.0	28.9	7.74101	0.827	-90.7	69.2 37.9 34.4	30.2 29.60685 14-15
16	-10.545	-19.208	466.31854	-64.8	8.7	-81.1	26.9	7.58490	0.849	-86.1	68.9 38.0 32.3	30.5 29.60685 15-16

JULY 31, 1964 13 HR 22 MIN 54 SEC 784 MS TAB NO 167 ATLAS PHOTO NO 167 POD SEQUENCE NO 337

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
				174.015	397.43472	-8.369	-25.463	2132.890	2.405	-67.366	115.606	
PHOTO DATA												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE PT-PT
2	-11.473	-17.832	482.05203	-62.2	10.5	-83.1	27.8	7.87225	0.780	-90.8	70.3 34.2 38.7	35.2 0. 1-2
3	-10.967	-18.569	466.42367	-63.6	9.6	-82.0	27.3	7.60891	0.816	-88.2	69.6 36.1 35.4	32.9 28.71571 2-3
4	-10.930	-17.291	488.22409	-66.3	10.6	-81.9	26.2	7.96284	0.767	-88.0	70.8 32.3 40.0	37.9 38.01593 3-4
5	-12.025	-17.026	500.53147	-61.0	11.5	-84.4	28.3	8.16522	0.762	-93.7	71.2 32.4 42.2	37.4 34.07313 4-5
6	-12.012	-18.355	477.44978	-57.9	10.4	-84.2	29.3	7.78695	0.791	-93.3	69.9 36.1 37.8	32.3 39.37527 5-6
7	-10.967	-18.569	466.42367	-63.6	9.6	-82.0	27.3	7.60891	0.816	-88.2	69.6 36.1 35.4	32.9 32.27435 6-7
8	-10.551	-19.238	453.62850	-64.8	8.7	-81.1	27.0	7.37849	0.849	-86.1	68.9 38.0 32.2	30.4 23.55793 7-8
9	-10.496	-18.043	472.61298	-67.6	9.7	-80.9	25.9	7.70131	0.802	-85.7	70.1 34.3 36.8	35.4 35.62372 8-9
10	-10.437	-16.715	496.56144	-69.9	10.7	-80.8	24.8	8.06993	0.752	-85.2	71.4 30.6 41.5	40.5 39.60075 9-10
11	-11.461	-16.454	507.21947	-64.9	11.6	-83.2	26.7	8.26462	0.729	-90.9	71.7 30.4 43.4	40.3 31.98217 10-11
12	-12.648	-16.130	522.66686	-59.7	12.6	-86.0	28.8	8.49808	0.700	-97.0	72.1 30.7 45.8	39.4 37.20238 11-12
13	-12.601	-17.573	495.78283	-56.9	11.4	-85.6	29.8	8.07532	0.752	-96.3	70.7 34.4 41.4	34.2 42.66571 12-13
14	-12.564	-18.859	474.57205	-53.3	10.2	-85.3	30.9	7.70913	0.800	-95.8	69.5 38.1 37.2	29.3 38.03164 13-14
15	-11.487	-19.067	462.14634	-59.0	9.4	-83.0	28.8	7.53024	0.827	-90.7	69.1 37.9 34.4	30.2 33.14592 14-15
16	-10.551	-19.238	453.62850	-64.8	8.7	-81.1	27.0	7.37849	0.849	-86.1	68.9 38.0 32.2	30.4 28.79904 15-16

JULY 31, 1964 13 HR 22 MIN 59 SEC 904 MS TAB NO 168 ATLAS PHOTO NO 168 POD SEQUENCE NO 339

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
				168.895	386.05899	-8.424	-25.346	2121.514	2.410	-67.288	115.587	
PHOTO DATA												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE PT-PT
2	-11.453	-17.903	468.48658	-62.2	10.5	-83.1	27.8	7.65072	0.781	-90.8	70.3 34.2 38.7	35.1 0. 1-2
3	-10.941	-18.618	453.32750	-63.6	9.6	-81.9	27.3	7.39527	0.817	-88.2	69.5 36.1 35.3	32.8 25.94725 2-3
4	-10.925	-17.377	474.46764	-66.3	10.6	-81.9	26.3	7.73840	0.768	-88.0	70.7 32.3 39.9	37.8 36.91670 3-4
5	-11.988	-17.121	486.39326	-61.0	11.5	-84.4	28.3	7.93458	0.743	-93.7	71.1 32.4 42.1	37.3 33.10101 4-5
6	-11.976	-18.411	464.02437	-57.9	10.3	-84.2	29.3	7.56860	0.792	-93.3	69.8 36.1 37.7	32.2 38.22915 5-6
7	-10.961	-18.618	453.32750	-63.6	9.6	-81.9	27.3	7.39527	0.817	-88.2	69.5 36.1 35.3	32.8 31.36075 6-7
8	-10.556	-19.268	440.90589	-64.8	8.8	-81.0	27.0	7.17155	0.849	-86.1	68.9 38.0 32.2	30.4 22.88890 7-8
9	-10.503	-18.107	459.32457	-67.6	9.7	-80.9	25.9	7.48479	0.803	-85.7	70.0 34.3 36.7	35.3 34.60615 8-9
10	-10.445	-16.818	482.52918	-69.9	10.7	-80.7	24.9	7.84192	0.753	-85.2	71.3 30.6 41.4	40.4 38.44263 9-10
11	-11.441	-16.566	492.86443	-64.9	11.5	-83.2	26.7	8.03072	0.730	-90.9	71.6 30.4 43.2	40.2 31.07053 10-11
12	-12.594	-16.252	507.81760	-59.9	12.6	-86.0	28.8	8.25665	0.701	-97.0	72.0 30.7 45.7	39.2 36.12411 11-12
13	-12.548	-17.652	481.79182	-56.9	11.4	-85.6	29.8	7.84745	0.753	-96.3	70.6 34.4 41.3	34.2 41.39551 12-13
14	-12.512	-18.900	461.22661	-53.3	10.2	-85.3	30.8	7.49237	0.801	-95.8	69.4 38.1 37.1	29.2 36.33366 13-14
15	-11.466	-19.102	449.17812	-59.0	9.4	-83.0	28.8	7.31894	0.827	-90.7	69.1 37.9 34.3	30.1 32.25280 14-15
16	-10.556	-19.268	440.90589	-64.8	8.8	-81.0	27.0	7.17155	0.849	-86.1	68.9 38.0 32.2	30.4 27.98907 15-16

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JULY 31, 1964 13 HR 23 MIN 5 SEC 24 MS

TAB NO 169

ATLAS PHOTO NO 169

POD SEQUENCE NO 341

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				163.775		374.66586	-8.480	-25.228	2110.121	2.416	-67.209	115.568				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.432	-17.974	454.89135	-62.2	10.4	-83.1	27.8	7.42870	0.781	-90.8	70.2	34.2	38.6	35.0	0.	1-2
3	-10.954	-18.667	440.20777	-63.6	9.5	-81.9	27.4	7.18113	0.817	-88.2	69.5	36.1	35.3	32.8	25.17809	2-3
4	-10.919	-17.462	460.67754	-66.3	10.6	-81.9	26.3	7.51350	0.769	-88.0	70.7	32.3	39.8	37.7	35.81704	3-4
5	-11.952	-17.216	476.22742	-61.0	11.4	-84.4	28.3	7.70350	0.744	-93.7	71.0	32.4	42.0	37.2	32.12757	4-5
6	-11.940	-18.467	450.56852	-57.9	10.3	-84.2	29.3	7.34854	0.792	-93.3	69.8	36.1	37.7	32.2	37.08306	5-6
7	-10.954	-18.667	440.20777	-63.6	9.5	-81.9	27.4	7.18113	0.817	-88.2	69.5	36.1	35.3	32.8	30.44553	6-7
8	-10.562	-19.298	428.15265	-64.8	8.8	-81.0	27.0	6.96412	0.850	-86.1	68.8	38.0	32.2	30.4	22.21894	7-8
9	-10.510	-18.171	446.00679	-67.6	9.7	-80.9	26.0	7.26778	0.804	-85.7	69.9	34.3	36.7	35.3	33.58735	8-9
10	-10.453	-16.921	468.47010	-69.8	10.7	-80.7	24.9	7.61346	0.754	-85.2	71.2	30.6	41.3	40.3	37.28494	9-10
11	-11.420	-16.677	478.48322	-64.9	11.5	-83.1	26.8	7.79640	0.731	-90.9	71.5	30.4	43.1	40.1	30.15763	10-11
12	-12.538	-16.374	492.94482	-59.9	12.5	-85.9	29.8	8.01483	0.703	-97.0	71.9	30.7	45.6	39.1	35.04559	11-12
13	-12.495	-17.731	467.77244	-56.9	11.3	-85.6	29.8	7.61912	0.754	-96.3	70.5	34.4	41.2	34.1	40.12820	12-13
14	-12.461	-18.942	447.85099	-53.4	10.1	-85.3	30.8	7.27512	0.801	-95.8	69.4	38.1	37.1	29.2	35.83473	13-14
15	-11.445	-19.138	436.17899	-59.0	9.4	-83.0	28.8	7.10714	0.828	-90.7	69.1	37.9	34.3	30.1	31.30828	14-15
16	-10.562	-19.298	428.15265	-64.8	8.8	-81.0	27.0	6.96412	0.850	-86.1	68.8	38.0	32.2	30.4	27.17735	15-16

JULY 31, 1964 13 HR 23 MIN 10 SEC 144 MS

TAB NO 170

ATLAS PHOTO NO 170

POD SEQUENCE NO 343

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				158.655		363.25476	-8.537	-25.109	2098.710	2.421	-67.128	115.548				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.411	-18.045	441.26188	-62.2	10.4	-83.1	27.8	7.20612	0.782	-90.8	70.1	34.2	38.5	35.0	0.	1-2
3	-10.947	-18.717	427.03941	-63.5	9.5	-81.9	27.4	6.96642	0.817	-88.2	69.4	36.1	35.3	32.7	24.40790	2-3
4	-10.915	-17.550	446.85393	-66.2	10.5	-81.8	26.4	7.28865	0.770	-88.0	70.6	32.3	39.7	37.7	34.71623	3-4
5	-11.915	-17.311	458.02882	-61.0	11.4	-84.4	28.3	7.47167	0.745	-93.7	70.9	32.4	41.9	37.1	31.15236	4-5
6	-11.904	-18.523	437.07823	-57.9	10.3	-84.2	29.3	7.12853	0.793	-93.3	69.7	36.1	37.6	32.1	35.93628	5-6
7	-10.947	-18.717	427.03941	-63.5	9.5	-81.9	27.4	6.96642	0.817	-88.2	69.4	36.1	35.3	32.7	29.52814	6-7
8	-10.567	-19.329	415.36517	-64.7	8.8	-81.0	27.1	6.75613	0.850	-86.1	68.8	38.0	32.2	30.4	21.54745	7-8
9	-10.516	-18.236	432.65486	-67.5	9.7	-80.9	26.0	7.05022	0.804	-85.7	69.9	34.3	36.6	35.2	32.56676	8-9
10	-10.462	-17.025	454.37895	-69.8	10.7	-80.7	25.0	7.38448	0.755	-85.2	71.1	30.6	41.2	40.2	36.12684	9-10
11	-11.399	-16.789	464.07040	-64.8	11.5	-83.1	26.8	7.56156	0.733	-90.8	71.4	30.4	43.0	40.0	29.24312	10-11
12	-12.493	-16.497	478.04277	-59.9	12.5	-85.9	29.7	7.77254	0.705	-97.0	71.7	30.7	45.4	39.0	33.96623	11-12
13	-12.442	-17.810	453.71992	-56.9	11.3	-85.6	29.8	7.39024	0.755	-96.3	70.5	34.4	41.1	34.0	38.86186	12-13
14	-12.403	-18.984	434.44125	-53.4	10.1	-85.3	30.7	7.05731	0.802	-95.8	69.3	38.1	37.0	29.2	34.73478	13-14
15	-11.424	-19.173	423.14522	-59.0	9.4	-83.0	28.8	6.89476	0.828	-90.7	69.0	37.9	34.3	30.1	30.36161	14-15
16	-10.567	-19.329	415.36517	-64.7	8.8	-81.0	27.1	6.75613	0.850	-86.1	68.8	38.0	32.2	30.4	26.36355	15-16

JULY 31, 1964 13 HR 23 MIN 15 SEC 264 MS

TAB NO 171

ATLAS PHOTO NO 171

POD SEQUENCE NO 345

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				153.535		351.82571	-8.594	-24.988	2087.281	2.426	-67.048	115.529				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.390	-18.117	427.59946	-62.2	10.4	-83.0	27.8	6.98300	0.783	-90.8	70.1	34.2	38.5	34.9	0.	1-2
3	-10.941	-18.768	413.84441	-63.5	9.5	-81.9	27.4	6.75117	0.818	-88.2	69.4	36.1	35.2	32.7	23.63693	2-3
4	-10.908	-17.638	432.94768	-66.2	10.5	-81.8	26.4	7.06206	0.771	-88.0	70.5	32.3	39.6	37.6	33.61428	3-4
5	-11.878	-17.407	443.79924	-61.0	11.4	-84.3	28.3	7.23974	0.746	-93.7	70.8	32.4	41.8	37.0	30.17601	4-5
6	-11.867	-18.580	423.55529	-57.9	10.2	-84.2	29.2	6.90758	0.794	-93.3	69.7	36.1	37.6	32.1	34.78883	5-6
7	-10.941	-18.768	413.84441	-63.5	9.5	-81.9	27.4	6.75117	0.818	-88.2	69.4	36.1	35.2	32.7	28.60919	6-7
8	-10.572	-19.360	402.54409	-64.7	8.8	-81.0	27.1	6.54759	0.850	-86.1	68.8	38.0	32.2	30.3	20.87478	7-8
9	-10.523	-18.302	419.26938	-67.5	9.7	-80.8	26.1	6.83211	0.805	-85.7	69.8	34.3	36.5	35.2	31.54434	8-9
10	-10.470	-17.129	440.25612	-69.7	10.7	-80.6	25.1	7.15499	0.756	-85.2	70.9	30.6	41.1	40.1	34.96827	9-10
11	-11.378	-16.901	469.62720	-64.8	11.5	-83.1	26.8	7.32623	0.734	-90.8	71.2	30.4	42.9	39.9	28.32736	10-11
12	-12.428	-16.620	463.11373	-59.9	12.4	-85.9	28.7	7.52982	0.706	-97.0	71.6	30.7	45.3	38.9	32.88663	11-12
13	-12.388	-17.891	439.63659	-56.9	11.2	-85.5	29.7	7.16086	0.756	-96.3	70.4	34.4	41.0	33.9	37.59656	12-13
14	-12.357	-19.027	420.99968	-53.4	10.1	-85.3	30.7	6.83898	0.802	-95.8	69.3	38.1	37.0	29.1	33.63374	13-14
15	-11.402	-19.210	410.07819	-59.0	9.3	-83.0	28.8	6.68185	0.829	-90.7	69.0	37.9	34.2	30.1	29.41370	14-15
16	-10.572	-19.360	402.54409	-64.7	8.8	-81.0	27.1	6.54759	0.850	-86.1	68.8	38.0	32.2	30.3	25.54798	15-16

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JULY 31, 1964 13 HR 23 MIN 20 SEC 384 MS

TAB NO 172 ATLAS PHOTO NO 172 POD SEQUENCE NO 347

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				148.415		340.37839	-8.651	-24.866	2075.834	2.431	-66.966	115.508		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.369	-18.190	413.10539	-62.2	10.4	-83.0	27.8	6.75937	0.784	-90.8	70.0	34.2	34.8	0.
3	-10.934	-18.819	400.61656	-63.5	9.5	-81.9	27.4	6.53538	0.818	-88.1	69.3	36.1	35.2	22.86546
4	-10.902	-17.726	419.10938	-66.2	10.5	-81.8	26.4	6.83556	0.772	-88.0	70.4	32.3	39.6	32.51109
5	-11.841	-17.503	429.54068	-61.0	11.3	-84.3	28.3	7.00714	0.747	-93.7	70.7	32.4	41.7	29.19878
6	-11.831	-18.638	410.00159	-57.9	10.2	-84.2	28.2	6.68694	0.794	-93.3	69.6	36.1	37.5	33.64079
7	-10.934	-18.819	400.61656	-63.5	9.5	-81.9	27.4	6.53538	0.818	-88.1	69.3	36.1	35.2	27.68898
8	-10.577	-19.392	389.68990	-64.7	8.8	-81.0	27.1	6.33851	0.850	-86.1	68.7	38.0	32.1	30.3
9	-10.530	-18.328	405.85044	-67.4	9.7	-80.8	26.1	6.61346	0.805	-85.7	69.7	34.3	36.5	30.52002
10	-10.470	-17.234	426.10160	-69.7	10.7	-80.6	25.2	6.92456	0.757	-85.2	70.8	30.6	41.0	33.80905
11	-11.357	-17.015	435.15476	-64.8	11.4	-83.0	28.9	7.09042	0.735	-90.8	71.1	30.4	42.8	27.41060
12	-12.373	-16.744	448.16027	-59.9	12.4	-85.8	28.7	7.28669	0.708	-97.0	71.5	30.7	45.2	31.80741
13	-12.335	-17.971	425.72494	-56.9	11.2	-85.5	29.7	6.93103	0.757	-96.3	70.3	34.4	40.9	33.8
14	-12.305	-19.070	407.52879	-53.5	10.0	-85.3	30.7	6.62018	0.803	-95.8	69.2	38.1	36.9	32.53174
15	-11.881	-19.247	396.47929	-59.0	9.3	-83.0	28.8	6.46842	0.829	-90.7	69.0	37.9	34.2	28.46489
16	-10.577	-19.392	389.68990	-64.7	8.8	-81.0	27.1	6.33851	0.850	-86.1	68.7	38.0	32.1	30.3

JULY 31, 1964 13 HR 23 MIN 25 SEC 504 MS

TAB NO 173 ATLAS PHOTO NO 173 POD SEQUENCE NO 349

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				143.296		328.91293	-8.709	-24.743	2064.368	2.437	-66.883	115.488		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.367	-18.203	400.17604	-62.1	10.4	-83.0	27.9	6.53516	0.785	-90.8	69.9	34.2	38.3	0.
3	-10.928	-18.871	387.35311	-63.5	9.5	-81.9	27.5	6.31901	0.819	-88.1	69.3	36.1	35.1	22.09289
4	-10.896	-17.815	405.18671	-66.1	10.5	-81.8	26.5	6.60849	0.773	-88.0	70.3	32.3	39.5	31.40677
5	-11.804	-17.600	415.24795	-61.0	11.3	-84.3	28.3	6.77359	0.748	-93.7	70.6	32.4	41.6	28.21973
6	-11.795	-18.696	396.41229	-57.9	10.2	-84.2	29.2	6.46531	0.795	-93.3	69.5	36.1	37.4	32.49203
7	-10.928	-18.871	387.35311	-63.5	9.5	-81.9	27.5	6.31901	0.819	-88.1	69.3	36.1	35.1	26.76666
8	-10.582	-19.425	376.80050	-64.6	8.8	-81.0	27.2	6.12886	0.850	-86.1	68.7	38.0	32.1	19.52575
9	-10.536	-18.435	402.53673	-67.4	9.7	-80.8	26.2	6.39423	0.806	-85.7	69.7	34.3	36.4	29.49389
10	-10.487	-17.340	411.91431	-69.6	10.7	-80.6	25.2	6.69443	0.758	-85.2	70.7	30.6	40.9	32.64949
11	-11.336	-17.128	420.64981	-64.8	11.4	-83.0	26.9	6.85408	0.736	-90.8	71.0	30.4	42.7	26.69208
12	-12.318	-16.868	433.17623	-59.9	12.3	-85.8	28.7	7.04307	0.709	-97.0	71.4	30.7	45.1	30.72724
13	-12.282	-18.052	411.37698	-57.0	11.2	-85.5	29.7	6.70063	0.756	-96.3	70.2	34.4	40.8	33.8
14	-12.253	-19.114	394.02252	-53.5	10.0	-85.3	30.6	6.40060	0.804	-95.8	69.2	38.1	36.8	31.42848
15	-11.360	-19.284	383.84462	-59.0	9.3	-83.0	28.6	6.25440	0.829	-90.7	68.9	37.9	34.2	27.51401
16	-10.582	-19.425	376.80050	-64.6	8.8	-81.0	27.2	6.12886	0.850	-86.1	68.7	38.0	32.1	23.91134

JULY 31, 1964 13 HR 23 MIN 30 SEC 624 MS

TAB NO 174 ATLAS PHOTO NO 174 POD SEQUENCE NO 351

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				138.175		317.42896	-8.768	-24.618	2052.884	2.442	-66.800	115.467		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.326	-18.337	386.40806	-62.1	10.4	-83.0	27.9	6.31032	0.785	-90.8	69.8	34.2	38.3	0.
3	-10.921	-18.923	374.05117	-63.4	9.5	-81.9	27.5	6.10201	0.819	-88.1	69.2	36.1	35.1	21.31887
4	-10.890	-17.905	391.72647	-66.1	10.5	-81.7	26.5	6.38061	0.774	-88.0	70.2	32.3	39.4	30.40093
5	-11.766	-17.698	400.91774	-61.0	11.3	-84.2	28.3	6.54022	0.749	-93.7	70.5	32.4	41.5	27.23852
6	-11.758	-18.755	382.78396	-58.0	10.2	-84.2	29.2	6.24304	0.796	-93.3	69.5	36.1	37.4	31.34208
7	-10.921	-18.923	374.05117	-63.4	9.5	-81.9	27.5	6.10201	0.819	-88.1	69.2	36.1	35.1	25.84194
8	-10.587	-19.458	363.87331	-64.6	8.8	-81.0	27.2	5.91859	0.851	-86.0	68.7	38.0	32.1	18.84881
9	-10.544	-18.503	378.90510	-67.3	9.7	-80.8	26.3	6.17439	0.807	-85.7	69.6	34.3	36.4	28.46568
10	-10.495	-17.447	407.69166	-69.5	10.7	-80.5	25.3	6.46340	0.760	-85.2	70.6	30.6	40.8	31.48917
11	-11.319	-17.243	406.10855	-64.7	11.4	-83.0	26.9	6.61714	0.738	-90.8	70.9	30.4	42.6	25.57156
12	-12.262	-16.993	418.15725	-59.9	12.3	-85.7	28.7	6.79888	0.711	-97.0	71.2	30.7	44.9	29.64539
13	-12.229	-18.144	397.19467	-57.0	11.1	-85.5	29.7	6.46960	0.759	-96.3	70.1	34.4	40.7	33.7
14	-12.200	-19.158	380.47726	-53.5	10.0	-85.3	30.6	6.18078	0.804	-95.7	69.1	38.1	36.8	30.32352
15	-11.338	-19.322	370.67116	-59.0	9.3	-83.0	28.6	6.03975	0.830	-90.7	68.9	37.9	34.1	26.56079
16	-10.587	-19.458	363.87331	-64.6	8.8	-81.0	27.2	5.91859	0.851	-86.0	68.7	38.0	32.1	23.08956

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JULY 31, 1964 13 HR 23 MIN 35 SEC 744 MS

TAB NO 175

ATLAS PHOTO NO 175

POD SEQUENCE NO 353

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				133.056		305.92644	-8.828	-24.491	2041.382	2.448	-66.716	115.446				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.304	-18.411	372.59944	-62.1	10.3	-83.0	27.9	6.08481	0.786	-90.7	69.8	34.2	38.2	34.6	0.	1-2
3	-10.913	-18.976	360.70895	-63.4	9.6	-81.8	27.5	5.88436	0.820	-88.1	69.2	36.1	35.0	32.5	20.54307	2-3
4	-10.884	-17.995	377.22655	-66.1	10.5	-81.7	26.6	6.15248	0.775	-87.9	70.1	32.3	39.3	37.2	29.19341	3-4
5	-11.728	-17.796	386.54748	-61.0	11.2	-84.2	28.3	6.30579	0.751	-93.6	70.4	32.4	41.4	36.6	26.25467	4-5
6	-11.720	-18.814	369.11443	-58.0	10.1	-84.1	29.2	6.02010	0.796	-93.3	69.4	36.1	37.3	31.9	30.19070	5-6
7	-10.913	-18.976	360.70895	-63.4	9.5	-81.8	27.5	5.88436	0.820	-88.1	69.2	36.1	35.0	32.5	24.91425	6-7
8	-10.592	-19.492	350.90674	-64.6	8.8	-81.0	27.2	5.70769	0.851	-86.0	68.6	38.0	32.1	30.2	18.16988	7-8
9	-10.549	-18.571	365.37393	-67.3	9.7	-80.8	25.3	5.45360	0.807	-85.7	69.5	34.3	36.3	34.9	27.43524	8-9
10	-10.502	-17.554	383.42492	-69.5	10.7	-80.5	25.4	6.23155	0.761	-85.2	70.5	30.6	40.7	39.7	30.32787	9-10
11	-11.293	-17.358	391.52871	-64.7	11.4	-82.9	27.0	6.37958	0.735	-90.8	70.8	30.4	42.5	39.4	24.64838	10-11
12	-12.206	-17.118	403.10055	-59.9	12.2	-85.7	28.7	6.55407	0.713	-97.0	71.1	30.7	44.8	38.4	28.56191	11-12
13	-12.173	-18.217	382.96960	-57.0	11.1	-85.5	29.6	6.23752	0.761	-96.3	70.0	34.4	40.6	33.0	32.54348	12-13
14	-12.147	-19.203	366.89081	-53.6	9.9	-85.3	30.5	5.96009	0.805	-95.7	69.1	38.1	36.7	29.0	29.21662	13-14
15	-11.316	-19.361	357.45705	-59.0	9.3	-83.0	28.8	5.82444	0.830	-90.7	68.8	37.9	34.1	29.9	25.60485	14-15
16	-10.592	-19.492	350.90674	-64.6	8.8	-81.0	27.2	5.70769	0.851	-86.0	68.6	38.0	32.1	30.2	22.26496	15-16

JULY 31, 1964 13 HR 23 MIN 40 SEC 864 MS

TAB NO 176

ATLAS PHOTO NO 176

POD SEQUENCE NO 355

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				127.936		294.40544	-8.888	-24.364	2029.861	2.453	-66.630	115.425				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.282	-18.487	358.75521	-62.1	10.3	-82.9	27.9	5.85873	0.787	-90.7	69.7	34.2	38.1	34.5	0.	1-2
3	-10.906	-19.030	347.33064	-63.4	9.5	-81.8	27.5	5.66612	0.820	-88.1	69.1	36.0	35.0	32.4	17.76621	2-3
4	-10.877	-18.086	363.19203	-66.0	10.5	-81.7	26.6	5.92358	0.776	-87.9	70.1	32.3	39.2	37.1	28.08485	3-4
5	-11.690	-17.895	372.14329	-61.0	11.2	-84.2	28.3	6.07062	0.752	-93.6	70.3	32.4	41.3	36.5	25.26901	4-5
6	-11.683	-18.874	355.40900	-58.0	10.1	-84.1	29.2	5.79658	0.797	-93.3	69.4	36.1	37.2	31.8	29.03863	5-6
7	-10.906	-19.030	347.33064	-63.4	9.5	-81.8	27.5	5.66612	0.820	-88.1	69.1	36.0	35.0	32.4	23.98450	6-7
8	-10.596	-19.526	337.90436	-64.5	8.8	-80.9	27.3	5.49620	0.851	-86.0	68.6	38.0	32.0	30.2	17.48954	7-8
9	-10.555	-18.640	351.80733	-67.2	9.7	-80.7	26.4	5.73264	0.808	-85.7	69.5	34.3	36.2	34.8	26.40304	8-9
10	-10.510	-17.662	369.13572	-69.4	10.7	-80.5	25.5	5.99926	0.762	-85.2	70.4	30.6	40.6	39.6	29.16631	9-10
11	-11.271	-17.474	376.91626	-64.7	11.3	-82.9	27.0	6.14149	0.740	-90.8	70.7	30.4	42.4	39.3	23.72367	10-11
12	-12.150	-17.244	388.01349	-59.9	12.2	-85.7	28.7	6.30877	0.714	-97.0	71.0	30.7	44.7	38.2	27.47735	11-12
13	-12.119	-18.300	368.71012	-57.0	11.0	-85.4	29.6	6.00567	0.762	-96.3	70.0	34.4	40.5	33.5	31.28157	12-13
14	-12.093	-19.249	333.26867	-53.6	9.9	-85.3	30.5	5.73882	0.806	-95.7	69.0	38.1	36.7	28.9	28.10657	13-14
15	-11.293	-19.400	344.20671	-59.0	9.3	-83.0	28.8	5.60854	0.830	-90.7	68.8	37.9	34.0	29.9	24.64685	14-15
16	-10.596	-19.526	337.90436	-64.5	8.8	-80.9	27.3	5.49620	0.851	-86.0	68.6	38.0	32.0	30.2	21.43829	15-16

JULY 31, 1964 13 HR 23 MIN 45 SEC 983 MS

TAB NO 177

ATLAS PHOTO NO 177

POD SEQUENCE NO 357

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				122.816		282.86540	-8.948	-24.234	2018.321	2.459	-66.544	115.403				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.259	-18.563	344.87149	-62.1	10.3	-82.9	27.9	5.63199	0.788	-90.7	69.6	34.2	38.0	34.5	0.	1-2
3	-10.894	-19.085	333.91264	-63.4	9.5	-81.8	27.6	5.44722	0.821	-88.1	69.1	36.0	34.9	32.4	18.98811	2-3
4	-10.870	-18.178	349.11832	-66.0	10.5	-81.7	26.7	5.69405	0.776	-87.9	70.0	32.3	39.1	37.0	26.97448	3-4
5	-11.652	-17.995	357.70093	-60.9	11.2	-84.2	26.3	5.83522	0.753	-93.6	70.2	32.4	41.2	36.4	24.28143	4-5
6	-11.645	-18.935	341.66428	-58.0	10.1	-84.1	29.2	5.57241	0.798	-93.3	69.3	36.1	37.2	31.7	27.88523	5-6
7	-10.898	-19.085	333.91264	-63.4	9.5	-81.8	27.6	5.44722	0.821	-88.1	69.1	36.0	34.9	32.4	23.05262	6-7
8	-10.600	-19.561	324.86278	-64.5	8.8	-80.9	27.3	5.28407	0.851	-86.0	68.6	38.0	32.0	30.2	16.80748	7-8
9	-10.560	-18.710	338.20115	-67.2	9.7	-80.7	26.4	5.51113	0.809	-85.7	69.4	34.3	36.2	34.8	25.36849	8-9
10	-10.517	-17.771	354.80335	-69.4	10.6	-80.5	25.5	5.76635	0.763	-85.2	70.3	30.5	40.5	39.5	28.00359	9-10
11	-11.249	-17.591	362.26625	-64.6	11.3	-82.9	27.0	5.90278	0.742	-90.8	70.6	30.4	42.3	39.2	22.79701	10-11
12	-12.093	-17.371	372.89133	-59.9	12.1	-85.6	28.7	6.08291	0.716	-96.9	70.9	30.7	44.5	38.1	26.39166	11-12
13	-12.063	-18.384	354.41249	-57.0	11.0	-85.4	29.6	5.77279	0.763	-96.3	69.9	34.4	40.4	33.4	30.01978	12-13
14	-12.039	-19.295	339.60751	-53.6	9.9	-85.3	30.4	5.51693	0.806	-95.7	69.0	38.1	36.6	28.9	26.99872	13-14
15	-11.270	-19.440	330.91697	-59.0	9.3	-83.0	28.8	5.39200	0.831	-90.7	68.8	37.9	34.0	29.8	23.68676	14-15
16	-10.600	-19.561	324.86278	-64.5	8.8	-80.9	27.3	5.28407	0.851	-86.0	68.6	38.0	32.0	30.2	20.60928	15-16

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JULY 31, 1964 13 HR 23 MIN 51 SEC 103 MS TAB NO 178 ATLAS PHOTO NO 178 POD SEQUENCE NO 359

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				117.696		271.30641	-9.010	-24.103	2006.762	2.465	-66.457	115.381				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-11.237	-18.639	330.94765	-62.1	10.3	-82.9	27.9	5.40461	0.789	-90.7	69.5	34.2	38.0	34.4	1-2	
3	-10.890	-19.140	320.45437	-63.3	9.5	-81.8	27.6	5.22767	0.821	-88.1	69.0	36.0	34.9	32.3	18.20861	2-3
4	-10.863	-18.271	335.00477	-65.9	10.5	-81.6	26.7	5.46367	0.777	-87.9	69.9	32.3	39.0	36.9	25.86226	3-4
5	-11.613	-18.096	343.21972	-60.9	11.1	-84.1	28.3	5.59899	0.754	-93.6	70.1	32.4	41.1	36.3	23.29193	4-5
6	-11.607	-18.997	327.87974	-58.0	10.1	-84.1	29.1	5.34760	0.798	-93.3	69.2	36.1	37.1	31.7	26.73034	5-6
7	-10.890	-19.140	320.45437	-63.3	9.5	-81.8	27.6	5.22767	0.821	-88.1	69.0	36.0	34.9	32.3	22.11843	6-7
8	-10.604	-19.597	311.78146	-64.5	8.8	-80.9	27.3	5.07130	0.852	-86.0	68.5	38.0	32.0	30.1	16.12370	7-8
9	-10.566	-18.781	324.55473	-67.1	9.7	-80.7	26.5	5.28877	0.809	-85.7	69.3	34.3	36.1	34.7	24.33148	8-9
10	-10.524	-17.881	340.43204	-65.3	10.6	-80.4	25.6	5.53281	0.764	-85.2	70.2	30.5	40.4	39.3	26.83965	9-10
11	-11.226	-17.708	347.57798	-64.6	11.3	-82.8	27.1	5.66345	0.743	-90.8	70.5	30.4	42.1	39.1	21.86849	10-11
12	-12.036	-17.499	357.73346	-59.8	12.1	-85.6	28.7	5.81646	0.718	-96.9	70.7	30.7	44.4	38.0	25.30478	11-12
13	-12.008	-18.469	340.07523	-57.0	10.9	-85.4	29.6	5.53929	0.764	-96.3	69.8	34.4	40.3	33.4	28.75800	12-13
14	-11.985	-19.343	325.90818	-53.6	9.8	-85.3	30.4	5.29440	0.807	-95.7	68.9	38.1	36.5	28.8	25.88699	13-14
15	-11.247	-19.481	317.58735	-59.0	9.3	-83.0	28.8	5.17481	0.831	-90.7	68.7	37.9	33.9	29.8	22.72478	14-15
16	-10.604	-19.597	311.78146	-64.5	8.8	-80.9	27.3	5.07130	0.852	-86.0	68.5	38.0	32.0	30.1	19.77784	15-16

JULY 31, 1964 13 HR 23 MIN 56 SEC 223 MS TAB NO 179 ATLAS PHOTO NO 179 POD SEQUENCE NO 361

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				112.576		259.72833	-9.072	-23.971	1995.184	2.470	-66.370	115.358				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-11.214	-18.717	316.98746	-62.0	10.3	-82.9	28.0	5.17663	0.789	-90.7	69.5	34.2	37.9	34.3	1-2	
3	-10.882	-19.196	306.95914	-63.3	9.5	-81.8	27.6	5.00752	0.822	-88.1	69.0	36.0	34.8	32.3	17.42804	2-3
4	-10.856	-18.364	320.85594	-65.9	10.4	-81.6	26.8	5.23311	0.778	-87.9	69.8	32.3	39.0	36.9	24.74907	3-4
5	-11.574	-18.197	328.70400	-60.9	11.1	-84.1	28.3	5.36219	0.755	-93.6	70.0	32.4	41.0	36.2	22.30062	4-5
6	-11.568	-19.059	314.05838	-58.0	10.0	-84.1	29.1	5.12218	0.799	-93.3	69.2	36.1	37.0	31.6	25.57492	5-6
7	-10.882	-19.196	306.95914	-63.3	9.5	-81.8	27.6	5.00752	0.822	-88.1	69.0	36.0	34.8	32.3	21.18195	6-7
8	-10.608	-19.634	298.66334	-64.4	8.8	-80.9	27.4	4.85793	0.852	-86.0	68.5	38.0	31.9	30.1	15.3854	7-8
9	-10.571	-18.852	310.87212	-67.1	9.7	-80.7	26.5	5.06581	0.810	-85.6	69.3	34.3	36.1	34.6	23.29279	8-9
10	-10.531	-17.991	326.02721	-69.3	10.6	-80.4	25.7	5.29872	0.765	-85.2	70.1	30.6	40.3	39.2	25.67552	9-10
11	-11.203	-17.826	332.85661	-64.6	11.3	-82.8	27.1	5.42359	0.744	-90.8	70.3	30.4	42.0	38.9	20.93805	10-11
12	-11.979	-17.627	342.54473	-59.8	12.0	-85.5	28.7	5.56950	0.719	-96.9	70.6	30.7	44.3	37.8	24.21706	11-12
13	-11.952	-18.554	325.70472	-57.0	10.9	-85.4	29.5	5.30521	0.765	-96.3	69.7	34.4	40.2	33.3	27.47934	12-13
14	-11.931	-19.390	312.17172	-53.7	9.8	-85.3	30.3	5.07127	0.808	-95.7	68.9	38.1	36.5	28.8	24.77414	13-14
15	-11.224	-19.523	304.22050	-59.0	9.3	-83.0	28.8	4.95761	0.832	-90.7	68.7	37.9	33.9	29.8	21.76054	14-15
16	-10.608	-19.634	298.66334	-64.4	8.8	-80.9	27.4	4.85793	0.852	-86.0	68.5	38.0	31.9	30.1	18.94433	15-16

JULY 31, 1964 13 HR 24 MIN 1 SEC 343 MS TAB NO 180 ATLAS PHOTO NO 180 POD SEQUENCE NO 363

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				107.456		248.13104	-9.134	-23.837	1983.586	2.476	-66.281	115.335		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.191	-18.795	302.98786	-62.0	10.2	-82.9	28.0	4.94861	0.790	-90.7	69.4	34.2	37.8	34.2
3	-10.873	-19.252	293.42421	-63.3	9.5	-81.8	27.6	4.78672	0.822	-88.1	68.9	36.0	34.8	32.2
4	-10.849	-18.458	306.66844	-65.9	10.4	-81.6	26.8	5.00172	0.779	-87.9	69.7	32.3	38.9	36.8
5	-11.535	-18.300	314.15028	-60.9	11.1	-84.1	28.3	5.12477	0.757	-93.6	69.9	32.4	40.9	36.1
6	-11.529	-19.122	300.19745	-58.0	10.0	-84.1	29.1	4.89612	0.800	-93.3	69.1	36.1	37.0	31.5
7	-10.873	-19.252	293.42421	-63.3	9.5	-81.8	27.6	4.78672	0.822	-88.1	68.9	36.0	34.8	32.2
8	-10.612	-19.671	285.50592	-64.4	8.8	-80.9	27.4	4.64392	0.852	-86.0	68.5	38.0	31.9	30.0
9	-10.577	-18.924	297.15028	-67.0	9.7	-80.6	26.6	4.84221	0.811	-85.6	69.2	34.3	36.0	34.5
10	-10.538	-18.102	311.58513	-69.2	10.6	-80.4	25.8	5.08402	0.766	-85.2	70.0	30.6	40.2	39.1
11	-11.181	-17.945	318.09835	-64.6	11.2	-82.8	27.2	5.18312	0.746	-90.8	70.2	30.4	41.9	38.8
12	-11.921	-17.756	327.32124	-59.8	11.9	-85.5	28.7	5.32158	0.721	-96.9	70.5	30.7	44.1	37.7
13	-11.896	-18.641	311.29491	-57.0	10.9	-85.4	29.5	5.07051	0.766	-96.3	69.6	34.4	40.1	33.2
14	-11.876	-19.439	298.39606	-53.7	9.8	-85.3	30.3	4.84750	0.808	-95.7	68.8	38.1	36.4	28.7
15	-11.201	-19.565	290.81388	-59.0	9.2	-83.0	26.8	4.73856	0.832	-90.7	68.6	37.9	33.9	29.7
16	-10.612	-19.671	285.50592	-64.4	8.8	-80.9	27.4	4.64392	0.852	-86.0	68.5	38.0	31.9	30.0

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JULY 31, 1964 13 HR 24 MIN 6 SEC 463 MS TAB NO 181 ATLAS PHOTO NO 181 POD SEQUENCE NO 365

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				102.336		236.51411		-9.198		-23.701		1971.969		2.482		-66.191		115.312	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.167	-18.874	288.94843	-62.0	10.2	-82.8	26.0	4.71873	0.791	-90.7	69.3	34.2	37.7	34.1	0.	1-2			
3	-10.865	-19.310	279.84908	-63.2	9.5	-81.7	27.7	4.56527	0.823	-88.1	68.9	36.1	34.7	32.1	15.86316	2-3			
4	-10.841	-18.553	292.44191	-65.8	10.4	-81.6	26.9	4.76969	0.780	-87.9	69.6	32.3	38.8	36.7	22.51828	3-4			
5	-11.495	-18.402	299.55822	-60.9	11.0	-84.1	28.3	4.88673	0.758	-93.6	69.8	32.4	40.8	36.0	20.31168	4-5			
6	-11.490	-19.186	286.29647	-58.0	10.0	-84.1	29.1	4.66940	0.801	-93.3	69.0	36.1	36.9	31.5	23.26082	5-6			
7	-10.865	-19.310	279.84908	-63.2	9.5	-81.7	27.7	4.56527	0.823	-88.1	68.9	36.1	34.7	32.1	19.30219	6-7			
8	-10.615	-19.709	272.30868	-64.3	8.8	-80.9	27.4	4.42926	0.853	-86.0	68.4	38.0	31.9	30.0	14.06327	7-8			
9	-10.582	-18.997	283.38878	-67.0	9.7	-80.6	26.7	4.61797	0.811	-85.6	69.1	34.3	35.9	34.5	21.20910	8-9			
10	-10.545	-18.214	297.10551	-69.2	10.6	-80.3	25.9	4.82871	0.766	-85.2	69.9	30.6	40.1	39.0	23.34502	9-10			
11	-11.157	-18.065	303.30291	-64.5	11.2	-82.7	27.2	4.94204	0.747	-90.8	70.1	30.4	41.8	38.7	19.07135	10-11			
12	-11.863	-17.885	312.06272	-59.8	11.9	-85.5	28.7	5.07390	0.723	-96.9	70.3	30.7	44.0	37.6	22.03757	11-12			
13	-11.940	-18.727	296.84636	-57.0	10.8	-85.4	29.5	4.83518	0.767	-96.3	69.5	34.4	40.0	33.1	24.97728	12-13			
14	-11.871	-19.488	284.58062	-53.7	9.7	-85.3	30.2	4.62308	0.809	-95.7	68.8	38.1	36.3	28.7	22.54376	13-14			
15	-11.177	-19.608	277.36700	-57.0	9.2	-82.9	28.8	4.51946	0.833	-90.7	68.6	37.9	33.8	29.7	19.82562	14-15			
16	-10.615	-19.709	272.30868	-64.3	8.8	-80.9	27.4	4.42926	0.853	-86.0	68.4	38.0	31.9	30.0	17.27002	15-16			

JULY 31, 1964 13 HR 24 MIN 11 SEC 583 MS TAB NO 182 ATLAS PHOTO NO 182 POD SEQUENCE NO 367

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				97.716		224.87769		-9.262		-23.564		1960.333		2.488		-66.100		115.288	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.144	-18.954	274.87216	-62.0	10.2	-82.8	28.0	4.48886	0.792	-90.7	69.2	34.2	37.6	34.1	0.	1-2			
3	-10.856	-19.368	266.23637	-63.2	9.5	-81.7	27.7	4.34320	0.824	-88.1	68.8	36.1	34.6	32.1	15.07914	2-3			
4	-10.833	-18.649	278.17968	-65.8	10.4	-81.5	27.0	4.53708	0.781	-87.9	69.5	32.3	38.7	36.6	21.40129	3-4			
5	-11.455	-18.506	284.93126	-60.9	11.0	-84.0	28.4	4.64812	0.759	-93.6	69.7	32.4	40.7	35.9	19.31443	4-5			
6	-11.451	-19.290	272.35809	-58.0	10.0	-84.1	29.1	4.44208	0.802	-93.3	69.0	36.1	36.8	31.4	22.10276	5-6			
7	-10.856	-19.368	266.23637	-63.2	9.5	-81.7	27.7	4.34320	0.824	-88.1	68.8	36.1	34.6	32.1	18.35878	6-7			
8	-10.619	-19.747	259.07388	-64.3	8.8	-80.9	27.5	4.21397	0.853	-86.0	68.4	38.0	31.8	30.0	13.37342	7-8			
9	-10.587	-19.070	269.59054	-66.9	9.7	-80.6	26.7	4.39313	0.812	-85.6	69.1	34.3	35.9	34.4	20.16459	8-9			
10	-10.552	-18.326	282.59203	-69.1	10.6	-80.3	26.0	4.59285	0.769	-85.2	69.8	30.6	40.0	38.9	22.17931	9-10			
11	-11.134	-18.185	288.47406	-64.5	11.2	-82.7	27.3	4.70042	0.749	-90.8	70.0	30.4	41.7	38.6	18.13528	10-11			
12	-11.805	-18.015	296.77312	-59.8	11.8	-85.4	28.7	4.82530	0.724	-96.9	70.2	30.7	43.8	37.4	20.94632	11-12			
13	-11.784	-18.815	282.36217	-57.0	10.8	-85.3	29.5	4.59926	0.768	-96.3	69.4	34.4	39.9	33.0	23.71863	12-13			
14	-11.765	-19.537	270.72786	-53.8	9.7	-85.3	30.2	4.39866	0.810	-95.7	68.7	38.1	36.2	28.6	21.42678	13-14			
15	-11.153	-19.651	263.88216	-59.0	9.2	-82.9	28.8	4.29973	0.833	-90.7	68.6	37.9	33.8	29.6	18.85501	14-15			
16	-10.619	-19.747	259.07388	-64.3	8.8	-80.9	27.5	4.21399	0.853	-86.0	68.4	38.0	31.8	30.0	16.42918	15-16			

JULY 31, 1964 13 HR 24 MIN 16 SEC 703 MS TAB NO 183 ATLAS PHOTO NO 183 POD SEQUENCE NO 369

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				92.096		213.22008		-9.327		-23.425		1948.675		2.494		-66.008		115.264	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.120	-19.034	260.75618	-61.9	10.2	-82.8	28.1	4.25833	0.793	-90.7	69.2	34.2	37.6	34.0	0.	1-2			
3	-10.847	-19.426	252.58326	-63.2	9.5	-81.7	27.7	4.12048	0.824	-88.1	68.7	36.1	34.6	32.0	14.29405	2-3			
4	-10.825	-18.745	263.37850	-65.7	10.4	-81.5	27.0	4.30383	0.782	-87.9	69.4	32.3	38.6	36.5	20.28298	3-4			
5	-11.415	-18.610	270.26655	-60.9	10.9	-84.0	28.4	4.40890	0.760	-93.6	69.6	32.4	40.6	35.8	18.31526	4-5			
6	-11.411	-19.315	258.37992	-58.0	9.9	-84.0	29.1	4.21410	0.802	-93.3	68.9	36.1	36.7	31.3	20.94384	5-6			
7	-10.847	-19.426	252.58326	-63.2	9.5	-81.7	27.7	4.12048	0.824	-88.1	68.7	36.1	34.6	32.0	17.41335	6-7			
8	-10.622	-19.766	245.79877	-64.2	8.8	-80.8	27.5	3.99806	0.853	-86.0	68.4	38.0	31.8	29.9	12.68208	7-8			
9	-10.591	-19.145	255.75238	-66.9	9.7	-80.6	26.8	4.16764	0.813	-85.6	69.0	34.3	35.8	34.3	19.11809	8-9			
10	-10.558	-18.440	268.04105	-69.0	10.6	-80.3	26.1	4.35638	0.770	-85.2	69.7	30.6	39.9	38.8	21.01304	9-10			
11	-11.111	-18.306	273.60856	-64.4	11.1	-82.7	27.3	4.45820	0.750	-90.8	69.9	30.4	41.6	38.5	17.19737	10-11			
12	-11.747	-18.146	281.44957	-59.8	11.8	-85.4	28.7	4.57616	0.726	-96.9	70.1	30.7	43.7	37.3	19.85392	11-12			
13	-11.727	-18.903	267.83990	-57.0	10.7	-85.3	29.4	4.36273	0.769	-96.3	69.3	34.4	39.8	32.9	22.46075	12-13			
14	-11.710	-19.587	256.83570	-53.8	9.7	-85.3	30.2	4.17240	0.811	-95.7	68.7	38.1	36.2	28.6	20.30881	13-14			
15	-11.129	-19.695	250.35694	-59.0	9.2	-82.9	28.8	4.07935	0.834	-90.7	68.5	37.9	33.7	29.6	17.88230	14-15			
16	-10.622	-19.786	245.79877	-64.2	8.8	-80.8	27.5	3.99806	0.853	-86.0	68.4	38.0	31.8	29.9	15.58622	15-16			

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TAB NO 184

ATLAS PHOTO NO 184

POD SEQUENCE NO 371

JULY 31, 1964 13 HR 24 MIN 21 SEC 823 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				86.977		201.54546	-9.392	-23.284	1937.001	2.500	-65.915	115.239		
PHOTO DATA						A*	B/A	AZPHA2	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.096	-19.115	246.60559	-61.9	10.2	-82.8	26.1	4.02724	0.794	-90.7	69.1	34.2	37.5	33.9
3	-10.838	-19.486	238.89462	-63.1	9.4	-81.7	27.8	3.89717	0.825	-88.1	68.7	36.1	34.5	32.0
4	-10.817	-18.842	249.54365	-65.7	10.4	-81.5	27.1	4.07004	0.783	-87.9	69.3	32.3	38.5	36.4
5	-11.375	-18.715	255.56935	-60.8	10.9	-84.0	26.4	4.16914	0.762	-93.6	69.5	32.4	40.5	35.6
6	-11.371	-19.381	244.36678	-58.0	9.9	-84.0	29.1	3.98556	0.803	-93.3	68.8	36.1	36.7	31.3
7	-10.838	-19.486	238.89462	-63.1	9.4	-81.7	27.8	3.89717	0.825	-88.1	68.7	36.1	34.5	32.0
8	-10.625	-19.826	232.46805	-64.2	8.8	-80.8	27.6	3.78156	0.854	-86.0	68.3	38.0	31.8	29.9
9	-10.596	-19.219	241.87937	-66.8	9.7	-80.6	26.9	3.94157	0.813	-85.6	68.2	34.3	35.7	34.2
10	-10.564	-18.553	253.45806	-67.0	10.6	-80.2	26.1	4.11938	0.771	-85.2	69.6	30.6	39.8	38.7
11	-11.087	-18.427	258.71186	-64.4	11.1	-82.7	27.4	4.21548	0.751	-90.8	69.7	30.4	41.4	38.3
12	-11.688	-18.277	266.09755	-54.8	11.7	-83.4	28.7	4.32655	0.728	-96.9	69.9	30.7	43.6	37.1
13	-11.669	-18.991	253.28466	-57.0	10.7	-85.3	29.4	4.12565	0.771	-96.3	69.2	34.4	39.7	32.8
14	-11.653	-19.638	242.90880	-54.6	9.7	-85.3	30.1	3.94616	0.811	-95.7	68.6	38.1	36.0	28.5
15	-11.104	-19.740	236.79599	-59.0	9.2	-82.9	28.8	3.85839	0.834	-90.6	68.5	37.9	33.7	29.5
16	-10.625	-19.826	232.46805	-64.2	8.8	-80.8	27.6	3.78156	0.854	-86.0	68.3	38.0	31.8	29.9

TAB NO 185

ATLAS PHOTO NO 185

POD SEQUENCE NO 373

JULY 31, 1964 13 HR 24 MIN 26 SEC 943 MS

TRAJECTORY DATA				SEC TO IMPACT			ALT	LAT	LCN	R	V	PTH	AZ			
				81.857			189.84944	-9.458	-23.142	1925.305	2.506	-65.822	115.214			
PHOTO DATA							A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-11.371	-19.197	232.41524	-61.9	10.1	-82.8	28.1	3.79550	0.795	-90.7	69.0	34.2	37.4	33.8	0.	1-2
3	-10.828	-19.546	225.16552	-63.1	9.4	-81.7	27.8	3.67320	0.825	-88.1	68.6	36.1	34.5	31.9	12.72120	2-3
4	-10.809	-18.939	235.17025	-65.6	10.4	-81.5	27.1	3.83561	0.784	-87.9	69.2	32.3	38.4	36.3	18.04375	3-4
5	-11.334	-18.820	240.83433	-60.8	10.9	-84.0	28.4	3.92877	0.763	-93.6	69.4	32.4	40.4	35.5	16.31165	4-5
6	-11.331	-19.447	230.31328	-58.0	9.9	-84.0	29.1	3.75635	0.804	-93.3	68.8	36.1	36.6	31.2	18.62472	5-6
7	-10.828	-19.546	225.16552	-63.1	9.4	-81.7	27.8	3.67320	0.825	-88.1	68.6	36.1	34.5	31.9	15.51605	6-7
8	-10.628	-19.866	219.13690	-64.2	8.8	-80.8	27.6	3.56439	0.854	-86.0	68.3	38.0	31.7	29.8	11.29542	7-8
9	-10.600	-19.295	227.96681	-66.8	9.7	-80.5	26.9	3.71487	0.814	-85.6	68.8	34.3	35.6	34.2	17.02023	8-9
10	-10.571	-18.668	238.83846	-68.9	10.6	-80.2	26.2	3.88179	0.773	-85.2	69.5	30.6	39.7	38.5	16.68017	9-10
11	-11.063	-18.550	243.77895	-64.4	11.1	-82.6	27.4	3.97216	0.753	-90.8	69.6	30.4	41.3	38.2	15.31660	10-11
12	-11.629	-18.408	250.71147	-59.8	11.7	-85.3	28.7	4.07639	0.730	-96.9	69.8	30.7	43.4	37.0	17.66667	11-12
13	-11.612	-19.081	238.69076	-57.0	10.6	-85.3	29.4	3.88795	0.772	-96.3	69.2	34.4	39.6	32.7	19.94584	12-13
14	-11.597	-19.689	228.94151	-53.8	9.6	-85.3	30.1	3.71927	0.812	-95.7	68.6	38.1	36.0	28.5	16.06881	13-14
15	-11.073	-19.785	223.13415	-58.9	9.2	-82.9	28.8	3.63876	0.835	-90.6	68.4	37.9	33.6	29.5	15.93102	14-15
16	-10.625	-19.866	219.13690	-64.2	8.8	-80.8	27.6	3.56439	0.854	-86.0	68.3	38.0	31.7	29.8	13.89343	15-16

TAB NO 186

ATLAS PHOTO NO 186

POD SEQUENCE NO 375

JULY 31, 1964 13 HR 24 MIN 32 SEC 63 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				76.737		178.13318	-9.525	-22.997	1913.588	2.512	-65.727	115.189		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.046	-19.279	218.17922	-61.9	10.1	-82.8	28.1	3.56302	0.795	-90.7	68.9	34.2	37.3	33.7
3	-10.818	-19.606	211.39085	-63.1	9.4	-81.7	27.9	3.44849	0.826	-88.1	68.6	36.1	34.4	31.8
4	-10.800	-19.038	220.75217	-65.6	10.4	-81.4	27.2	3.60046	0.786	-87.9	69.1	32.3	38.3	36.2
5	-11.293	-18.526	226.05454	-60.8	10.8	-83.9	28.4	3.68766	0.764	-93.6	69.3	32.4	40.2	35.4
6	-11.290	-19.514	216.21374	-58.0	9.9	-84.0	29.1	3.52629	0.805	-93.3	68.7	36.1	36.5	31.1
7	-10.818	-19.606	211.39085	-63.1	9.4	-81.7	27.9	3.44849	0.826	-88.1	68.6	36.1	34.4	31.8
8	-10.630	-19.907	205.74097	-64.1	8.8	-80.8	27.7	3.34650	0.854	-86.0	68.3	38.0	31.7	29.8
9	-10.604	-19.371	214.00938	-66.7	9.7	-80.5	27.0	3.48743	0.815	-85.6	68.8	34.3	35.6	34.1
10	-10.576	-18.783	224.17576	-68.6	10.6	-80.2	26.3	3.64349	0.774	-85.2	69.3	30.6	39.6	38.4
11	-11.038	-18.673	228.80258	-64.3	11.1	-82.6	27.5	3.72813	0.754	-90.8	69.5	30.4	41.2	38.1
12	-11.570	-18.541	235.28318	-59.8	11.6	-85.3	28.7	3.82554	0.731	-96.9	69.7	30.7	43.3	36.9
13	-11.554	-19.171	224.05154	-57.0	10.6	-85.3	29.4	3.64950	0.773	-96.2	69.1	34.4	39.5	32.6
14	-11.540	-19.742	214.92832	-53.8	9.6	-85.3	30.0	3.49164	0.812	-95.7	68.5	38.1	36.0	28.4
15	-11.054	-19.831	209.54652	-58.9	9.2	-82.9	28.8	3.41439	0.835	-90.6	68.4	37.9	33.6	29.4
16	-10.630	-19.907	205.74097	-64.1	8.8	-80.8	27.7	3.34650	0.854	-86.0	68.3	38.0	31.7	29.8

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JULY 31, 1964 13 HR 24 MIN 37 SEC 182 MS

TAB NO 187

ATLAS PHOTO NO 187

POD SEQUENCE NO 377

TRAJECTORY DATA SEC TO IMPACT 71.617 ALT 166.39661 LAT -9.593 LCN -22.851 R 1901.852 V 2.519 PTH -65.631 AZ 115.163

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.021	-19.362	203.90153	-61.8	10.1	-82.7	28.2	3.32986	0.796	-90.7	68.6	34.2	37.2	33.6	0.	1-2
3	-10.808	-19.668	197.57406	-63.0	9.4	-81.7	27.9	3.22309	0.827	-88.1	68.5	36.1	34.3	31.8	11.14248	2-3
4	-10.791	-19.137	206.29354	-65.5	10.3	-81.4	27.3	3.36464	0.787	-87.9	69.0	32.3	38.2	36.0	15.79831	3-4
5	-11.252	-19.033	211.23471	-60.8	10.8	-83.9	28.4	3.44550	0.765	-93.6	69.2	32.4	40.1	35.3	14.29839	4-5
6	-11.249	-19.582	202.07157	-58.0	9.8	-84.0	29.1	3.29575	0.806	-93.3	68.6	36.1	36.4	31.1	16.30068	5-6
7	-10.808	-19.668	197.57406	-63.0	9.4	-81.7	27.9	3.22309	0.827	-88.1	68.5	36.1	34.3	31.8	13.60784	6-7
8	-10.632	-19.948	192.30315	-64.1	8.8	-80.8	27.7	3.12753	0.855	-86.0	68.2	38.0	31.6	29.7	9.90150	7-8
9	-10.608	-19.448	200.01064	-66.6	9.7	-80.5	27.1	3.25931	0.816	-85.6	68.7	34.3	35.5	34.0	14.91361	8-9
10	-10.582	-18.900	209.47437	-68.8	10.6	-80.2	26.4	3.40457	0.775	-85.2	69.2	30.6	39.5	38.3	16.34407	9-10
11	-11.013	-18.797	213.78765	-64.3	11.0	-82.6	27.5	3.48348	0.756	-90.8	69.4	30.4	41.1	37.9	13.42657	10-11
12	-11.510	-18.674	219.81821	-59.8	11.6	-85.3	28.7	3.57409	0.733	-96.9	69.5	30.7	43.1	36.7	15.47253	11-12
13	-11.495	-19.262	209.37155	-57.0	10.6	-85.2	29.4	3.41039	0.774	-96.2	69.0	34.4	39.4	32.5	17.43703	12-13
14	-11.482	-19.794	200.87293	-53.9	9.5	-85.3	30.0	3.26331	0.814	-95.7	68.4	38.1	35.9	28.4	15.82224	13-14
15	-11.028	-19.978	195.85636	-58.9	9.1	-82.9	28.8	3.19132	0.836	-90.6	68.3	37.9	33.5	29.4	13.96913	14-15
16	-10.632	-19.948	192.30315	-64.1	8.8	-80.8	27.7	3.12753	0.855	-86.0	68.2	38.0	31.6	29.7	12.18988	15-16

JULY 31, 1964 13 HR 24 MIN 42 SEC 302 MS

TAB NO 188

ATLAS PHOTO NO 188

POD SEQUENCE NO 379

TRAJECTORY DATA SEC TO IMPACT 66.497 ALT 154.63948 LAT -9.662 LCN -22.703 R 1890.095 V 2.525 PTH -65.534 AZ 115.136

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.995	-19.446	169.58592	-61.8	10.1	-82.7	28.2	3.09607	0.797	-90.7	68.7	34.2	37.1	33.5	0.	1-2
3	-10.797	-19.730	183.71828	-63.0	9.4	-81.6	27.9	2.99706	0.827	-88.1	68.4	36.1	34.3	31.7	10.35166	2-3
4	-10.781	-19.237	191.79831	-65.5	10.3	-81.4	27.3	3.12823	0.788	-87.9	68.9	32.3	38.1	35.9	14.67422	3-4
5	-11.210	-19.141	196.37928	-60.8	10.8	-83.9	28.4	3.20357	0.767	-93.6	69.1	32.4	40.0	35.2	13.28886	4-5
6	-11.207	-19.650	187.89159	-58.0	9.8	-84.0	29.0	3.06447	0.806	-93.3	68.6	36.1	36.3	31.0	15.13791	5-6
7	-10.797	-19.730	183.71828	-63.0	9.4	-81.6	27.9	2.99706	0.827	-88.1	68.4	36.1	34.3	31.7	12.65022	6-7
8	-10.634	-19.990	178.82614	-64.0	8.8	-80.8	27.7	2.90872	0.855	-86.0	68.2	38.0	31.6	29.7	9.20238	7-8
9	-10.611	-19.526	185.97393	-66.6	9.7	-80.5	27.1	3.03058	0.816	-85.6	68.6	34.3	35.4	33.9	13.05780	8-9
10	-10.587	-19.016	194.73840	-68.7	10.6	-80.1	26.5	3.16508	0.776	-85.2	69.1	30.6	39.3	38.2	15.17583	9-10
11	-10.988	-18.921	198.73881	-64.3	11.0	-82.5	27.6	3.23828	0.757	-90.8	69.3	30.5	40.9	37.8	12.47869	10-11
12	-11.449	-18.808	204.32180	-59.7	11.5	-85.2	28.7	3.32213	0.735	-96.9	69.4	30.7	43.0	36.6	14.37368	11-12
13	-11.436	-19.353	194.65504	-57.1	10.5	-85.2	29.3	3.17069	0.775	-96.2	68.9	34.4	39.3	32.4	16.18293	12-13
14	-11.424	-19.848	186.77885	-53.9	9.5	-85.3	29.9	3.03436	0.814	-95.7	68.4	38.1	35.8	28.3	14.69735	13-14
15	-11.002	-19.925	182.12672	-58.9	9.1	-82.9	28.8	2.96760	0.836	-90.6	68.3	37.9	33.4	29.3	12.98496	14-15
16	-10.634	-19.990	178.82614	-64.0	8.8	-80.8	27.7	2.90872	0.855	-86.0	68.2	38.0	31.6	29.7	11.33434	15-16

JULY 31, 1964 13 HR 24 MIN 47 SEC 422 MS

TAB NO 189

ATLAS PHOTO NO 189

POD SEQUENCE NO 381

TRAJECTORY DATA SEC TO IMPACT 61.377 ALT 142.86168 LAT -9.731 LCN -22.553 R 1878.317 V 2.532 PTH -65.435 AZ 115.109

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.969	-19.530	175.24440	-61.8	10.0	-82.7	28.2	2.86186	0.796	-90.7	68.7	34.2	37.0	33.4	0.	1-2
3	-10.786	-19.792	169.83402	-63.0	9.4	-81.6	28.0	2.77056	0.826	-88.1	68.4	36.1	34.2	31.6	9.56120	2-3
4	-10.771	-19.337	177.27928	-65.5	10.3	-81.4	27.4	2.89143	0.789	-87.9	68.8	32.3	38.0	35.8	13.55132	3-4
5	-11.167	-19.248	181.50202	-60.8	10.7	-83.9	28.5	2.96067	0.766	-93.6	69.0	32.4	39.9	35.1	12.27855	4-5
6	-11.165	-19.718	173.68396	-58.0	9.8	-84.0	29.0	2.83275	0.807	-93.3	68.5	36.1	36.3	30.9	13.97694	5-6
7	-10.786	-19.792	169.83402	-63.0	9.4	-81.6	28.0	2.77056	0.828	-88.1	68.4	36.1	34.2	31.6	11.69127	6-7
8	-10.635	-20.032	165.31912	-64.0	8.8	-80.8	27.8	2.68902	0.855	-86.0	68.1	38.0	31.6	29.7	8.50311	7-8
9	-10.614	-19.603	171.41048	-66.5	9.7	-80.4	27.2	2.80141	0.817	-85.6	68.6	34.3	35.3	33.8	12.80211	8-9
10	-10.592	-19.133	179.98157	-68.7	10.6	-80.1	26.6	2.92525	0.778	-85.2	69.0	30.6	39.2	38.1	14.00977	9-10
11	-10.963	-19.045	183.67070	-64.2	11.0	-82.5	27.6	2.99276	0.759	-90.8	69.1	30.5	40.8	37.7	11.53029	10-11
12	-11.389	-18.941	188.80987	-59.7	11.5	-85.2	28.7	3.06952	0.737	-96.9	69.3	30.7	42.8	36.4	13.27537	11-12
13	-11.377	-19.444	179.91507	-57.1	10.5	-85.2	29.3	2.93060	0.777	-96.2	68.8	34.4	39.2	32.3	14.93265	12-13
14	-11.366	-19.901	172.65677	-53.9	9.5	-85.3	29.9	2.80495	0.815	-95.7	68.3	38.1	35.7	28.2	13.57352	13-14
15	-10.976	-19.972	168.36748	-58.9	9.1	-82.9	28.8	2.74341	0.837	-90.6	68.2	37.9	33.4	29.3	11.99956	14-15
16	-10.635	-20.032	165.31912	-64.0	8.8	-80.8	27.8	2.68902	0.855	-86.0	68.1	38.0	31.6	29.7	10.47733	15-16

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JULY 31, 1964 13 HR 24 MIN 52 SEC 542 MS TAB NO 190 ATLAS PHOTO NO 190 POD SEQUENCE NO 383

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
PHOTO DATA				56.257			131.06296		-9.801		-22.401		1866.518		2.538		-65.336		115.082	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.943	-19.614	160.86663	-61.8	10.0	-82.7	28.2	2.62707	0.799	-90.7	68.6	34.2	37.0	33.4	0.	1-2				
3	-10.775	-19.854	155.91210	-62.9	9.4	-81.6	26.0	2.54345	0.828	-88.1	68.3	36.1	34.2	31.6	8.77024	2-3				
4	-10.761	-19.437	167.72544	-65.4	10.3	-81.3	27.4	2.65406	0.790	-87.9	68.7	32.3	37.9	35.7	12.42802	3-4				
5	-11.125	-19.355	166.59119	-60.7	10.7	-83.8	28.5	2.71763	0.764	-93.6	68.8	32.4	39.8	35.0	11.26682	4-5				
6	-11.123	-19.787	159.43923	-58.0	9.7	-84.0	29.0	2.60043	0.808	-93.3	68.4	36.1	36.2	30.8	12.81603	5-6				
7	-10.775	-19.854	155.91210	-62.9	9.4	-81.6	26.0	2.54345	0.828	-88.1	68.3	36.1	34.2	31.6	10.73033	6-7				
8	-10.636	-20.075	151.77396	-63.9	8.8	-80.7	27.8	2.46870	0.856	-86.0	68.1	38.0	31.5	29.6	7.60262	7-8				
9	-10.617	-19.681	157.81056	-66.5	9.7	-80.4	27.3	2.57165	0.818	-85.6	68.5	34.3	35.4	33.8	11.74523	8-9				
10	-10.597	-19.250	165.19217	-68.6	10.6	-80.1	26.7	2.68489	0.779	-85.1	68.9	30.6	39.1	37.9	12.84416	9-10				
11	-10.937	-19.169	168.57065	-64.2	11.0	-82.5	27.7	2.74672	0.760	-90.8	69.0	30.5	40.7	37.5	10.58027	10-11				
12	-11.324	-19.075	173.76891	-59.7	11.4	-85.1	28.7	2.81724	0.738	-96.9	69.1	30.7	42.7	36.3	12.17620	11-12				
13	-11.317	-19.935	165.14049	-57.1	10.4	-85.2	29.3	2.68995	0.778	-96.2	68.7	34.4	39.1	32.2	13.68406	12-13				
14	-11.307	-19.954	158.49742	-53.9	9.4	-85.2	29.8	2.57493	0.816	-95.7	68.3	38.1	35.7	28.2	12.44918	13-14				
15	-10.949	-20.019	154.56993	-58.9	9.1	-82.9	28.8	2.51859	0.837	-90.6	68.2	37.9	33.3	29.2	11.01218	14-15				
16	-10.636	-20.075	151.77396	-63.9	8.8	-80.7	27.8	2.46870	0.856	-86.0	68.1	38.0	31.5	29.6	9.61799	15-16				

JULY 31, 1964 13 HR 24 MIN 57 SEC 662 MS TAB NO 191 ATLAS PHOTO NO 191 POD SEQUENCE NO 385

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
PHOTO DATA				51.137		119.24339	-9.872	-22.247	1854.699	2.545	-65.235	115.054				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	A7A	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.917	-19.699	146.44681	-61.8	10.0	-82.7	28.2	2.39158	0.800	-90.7	68.5	34.2	36.9	33.3	0.	1-2
3	-10.764	-19.917	141.94742	-62.9	9.4	-81.6	28.0	2.31564	0.829	-88.1	68.3	36.1	34.1	31.5	7.97805	2-3
4	-10.751	-19.537	148.13067	-65.4	10.3	-81.3	27.5	2.41602	0.791	-87.9	68.6	32.3	37.8	35.6	11.30347	3-4
5	-11.082	-19.464	151.64021	-60.7	10.7	-83.8	28.5	2.47373	0.770	-93.6	68.7	32.4	39.7	34.9	10.25267	4-5
6	-11.080	-19.856	145.15195	-58.0	9.7	-84.0	29.0	2.36741	0.809	-93.2	68.3	36.1	36.1	30.8	11.65427	5-6
7	-10.764	-19.917	141.94742	-62.9	9.4	-81.6	28.0	2.31564	0.829	-88.1	68.3	36.1	34.1	31.5	9.76680	6-7
8	-10.637	-20.118	138.18607	-63.9	8.8	-80.7	27.9	2.24769	0.856	-86.0	68.1	38.0	31.5	29.6	7.10066	7-8
9	-10.620	-19.759	143.68869	-66.4	9.7	-80.4	27.3	2.34120	0.819	-85.6	68.4	34.3	35.2	33.7	10.68639	8-9
10	-10.601	-19.368	150.36364	-68.5	10.6	-80.0	26.8	2.44389	0.780	-85.1	68.8	30.6	39.0	37.8	11.67804	9-10
11	-10.911	-19.295	153.43233	-64.2	10.9	-82.4	27.7	2.50005	0.761	-90.8	68.9	30.5	40.6	37.4	9.62830	10-11
12	-11.266	-19.209	157.69149	-59.7	11.4	-85.1	28.7	2.56396	0.740	-96.9	69.0	30.7	42.5	36.2	11.07562	11-12
13	-11.257	-19.627	150.32510	-57.1	10.4	-85.2	29.3	2.44843	0.779	-96.2	68.6	34.4	39.0	32.2	12.43612	12-13
14	-11.248	-20.008	144.29558	-54.0	9.4	-85.2	29.8	2.34422	0.817	-95.7	68.2	38.1	35.6	28.1	11.32341	13-14
15	-10.922	-20.067	140.72925	-58.9	9.1	-82.9	28.8	2.29307	0.838	-90.6	68.1	37.9	33.3	29.2	10.02244	14-15
16	-10.637	-20.118	138.18607	-63.9	8.8	-80.7	27.9	2.24769	0.856	-86.0	68.1	38.0	31.5	29.6	8.75616	15-16

JULY 31, 1964 13 HR 25 MIN 2 SEC 782 MS TAB NO 192 ATLAS PHOTO NO 192 POD SEQUENCE NO 387

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
PHOTO DATA				46.017			107.40273		-9.944		-22.091		1842.858		2.551		-65.134		115.025	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.890	-19.784	131.98691	-61.7	10.0	-82.6	28.3	2.15544	0.801	-90.7	68.4	34.2	36.8	33.2	0.	1	2			
3	-10.752	-19.980	127.94160	-62.9	9.4	-81.6	26.1	2.08716	0.829	-88.1	68.2	36.1	34.0	31.4	7.18501	2	-3			
4	-10.740	-19.639	133.49716	-65.3	10.3	-81.3	27.5	2.17735	0.792	-87.9	68.5	32.3	37.7	35.5	10.17808	3	-4			
5	-11.037	-19.573	136.65145	-60.7	10.6	-83.8	28.5	2.22922	0.772	-93.6	68.6	32.4	39.6	34.8	9.23663	4	-5			
6	-11.037	-19.926	130.82394	-58.0	9.7	-83.9	29.0	2.13372	0.810	-93.2	68.3	36.1	36.0	30.7	10.49205	5	-6			
7	-10.752	-19.980	127.94160	-62.9	9.4	-81.6	26.1	2.08716	0.829	-88.1	68.2	36.1	34.0	31.4	8.80110	6	-7			
8	-10.638	-20.162	124.55682	-63.9	8.8	-80.7	27.9	2.02600	0.856	-86.0	68.0	38.0	31.5	29.5	6.39723	7	-8			
9	-10.622	-19.839	129.48074	-66.4	9.7	-80.4	27.4	2.11010	0.819	-85.6	68.3	34.3	35.1	33.6	9.62592	8	-9			
10	-10.605	-19.486	135.49843	-68.5	10.6	-80.0	26.9	2.20229	0.781	-85.1	68.7	30.6	38.9	37.7	10.51187	9	-10			
11	-10.884	-19.420	138.25768	-64.1	10.9	-82.4	27.7	2.25279	0.763	-90.7	68.8	30.4	40.4	37.3	8.67421	10	-11			
12	-11.205	-19.344	142.08033	-59.7	11.3	-85.1	28.7	2.31014	0.742	-96.9	68.9	30.7	42.4	36.0	9.97396	11	-12			
13	-11.196	-19.720	135.47101	-57.1	10.3	-85.2	29.2	2.20667	0.780	-96.2	68.5	34.4	38.9	32.1	11.18925	12	-13			
14	-11.188	-20.063	130.05487	-54.0	9.4	-85.2	29.8	2.11284	0.817	-95.7	68.2	38.1	35.2	28.1	10.18664	13	-14			
15	-10.895	-20.116	126.84694	-58.9	9.1	-82.9	28.8	2.06687	0.838	-90.6	68.1	37.9	33.2	29.1	9.03046	14	-15			
16	-10.638	-20.162	124.55682	-63.9	8.8	-80.7	27.9	2.02600	0.856	-86.0	68.0	38.0	31.5	29.5	7.89187	15	-16			

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JULY 31, 1964 13 HR 25 MIN 7 SEC 902 MS TAB NO 193 ATLAS PHOTO NO 193 POD SEQUENCE NO 389

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				40.898	95.54047	-10.017	-21.933	1830.996	2.558	-65.031	114.996					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.862	-19.870	117.48365	-61.7	10.0	-82.6	28.3	1.91859	0.802	-90.7	68.3	34.2	36.7	33.1	0.	1-2
3	-10.740	-20.045	113.89163	-62.8	9.4	-81.6	28.1	1.85795	0.830	-88.1	68.1	36.1	34.0	31.4	6.39073	2-3
4	-10.729	-19.741	118.82141	-65.3	10.3	-81.2	27.6	1.93799	0.793	-87.9	68.4	32.3	37.6	35.4	9.05139	3-4
5	-10.995	-19.682	121.62129	-60.7	10.6	-83.8	28.5	1.98403	0.773	-93.6	68.5	32.4	39.5	34.6	8.21836	4-5
6	-10.994	-19.996	116.45199	-58.0	9.7	-83.9	29.0	1.89932	0.810	-93.2	68.2	36.1	36.0	30.6	9.32894	5-6
7	-10.740	-20.045	113.89163	-62.8	9.4	-81.6	28.1	1.85795	0.830	-88.1	68.1	36.1	34.0	31.4	7.83262	6-7
8	-10.638	-20.206	110.88344	-63.8	8.8	-80.7	27.9	1.80359	0.857	-86.0	68.0	38.0	31.4	29.5	5.69218	7-8
9	-10.624	-19.919	115.26151	-66.3	9.7	-80.3	27.4	1.87829	0.820	-85.6	68.2	34.3	35.1	33.5	8.56347	8-9
10	-10.609	-19.605	120.59281	-68.4	10.6	-80.0	27.0	1.96003	0.782	-85.1	68.6	30.6	38.8	37.6	9.34513	9-10
11	-10.857	-19.547	123.04310	-64.1	10.9	-82.4	27.8	2.00488	0.764	-90.7	68.6	30.4	40.3	37.2	7.71817	10-11
12	-11.142	-19.479	126.43146	-59.7	11.2	-85.0	28.7	2.05570	0.743	-96.9	68.7	30.7	42.3	35.9	8.87069	11-12
13	-11.135	-19.813	120.57481	-57.1	10.3	-85.1	29.2	1.96404	0.781	-96.2	68.4	34.4	38.8	32.0	9.94295	12-13
14	-11.124	-20.118	115.76632	-54.0	9.4	-85.2	29.7	1.88075	0.818	-95.7	68.1	38.1	35.4	28.0	9.06848	13-14
15	-10.867	-20.165	112.52010	-58.9	9.1	-82.8	28.8	1.83994	0.839	-90.6	68.0	37.9	33.2	29.1	8.03600	14-15
16	-10.638	-20.206	110.88344	-63.8	8.8	-80.7	27.9	1.80359	0.857	-86.0	68.0	38.0	31.4	29.5	7.02480	15-16

JULY 31, 1964 13 HR 25 MIN 13 SEC 22 MS TAB NO 194 ATLAS PHOTO NO 194 POD SEQUENCE NO 391

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				35.772	83.45480	-10.090	-21.772	1819.112	2.565	-64.926	114.966					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.834	-19.957	102.93615	-61.7	10.0	-82.6	28.3	1.68102	0.803	-90.7	68.2	34.2	36.6	33.0	0.	1-2
3	-10.727	-20.110	99.79669	-62.8	9.4	-81.5	28.1	1.62802	0.831	-88.1	68.1	36.1	33.9	31.3	5.59518	2-3
4	-10.718	-19.844	104.10252	-65.2	10.3	-81.2	27.7	1.69752	0.794	-87.9	68.3	32.3	37.5	35.3	7.92330	3-4
5	-10.950	-19.793	106.54878	-60.7	10.6	-83.7	28.5	1.73815	0.774	-93.6	68.4	32.4	39.3	34.5	7.19786	4-5
6	-10.950	-20.067	102.03537	-58.0	9.6	-83.9	29.0	1.66419	0.811	-93.2	68.1	36.1	35.9	30.6	8.16478	5-6
7	-10.727	-20.110	99.79669	-62.8	9.4	-81.5	28.1	1.62802	0.831	-88.1	68.1	36.1	33.9	31.3	6.86154	6-7
8	-10.638	-20.251	97.16515	-63.8	8.8	-80.7	28.0	1.58046	0.857	-86.0	67.9	38.0	31.4	29.4	4.98554	7-8
9	-10.626	-19.999	100.99210	-66.3	9.7	-80.3	27.5	1.64576	0.821	-85.6	68.2	34.3	35.0	33.5	7.49492	8-9
10	-10.613	-19.725	105.64583	-68.3	10.6	-79.9	27.0	1.71710	0.784	-85.1	68.4	30.6	38.7	37.5	8.17773	9-10
11	-10.830	-19.674	107.78760	-64.1	10.9	-82.3	27.8	1.75631	0.765	-90.7	68.5	30.4	40.2	37.0	6.75987	10-11
12	-11.080	-19.615	110.74387	-59.7	11.2	-85.0	28.7	1.80063	0.745	-96.9	68.6	30.7	42.1	35.8	7.76597	11-12
13	-11.073	-19.907	105.63565	-57.1	10.3	-85.1	29.2	1.72070	0.782	-96.2	68.3	34.4	38.7	31.9	8.69703	12-13
14	-11.067	-20.174	101.43520	-54.1	9.3	-85.2	29.6	1.64793	0.819	-95.7	68.0	38.1	35.4	28.0	7.93873	13-14
15	-10.839	-20.216	98.94799	-58.9	9.0	-82.8	28.8	1.61228	0.839	-90.6	68.0	37.9	33.1	29.0	7.03909	14-15
16	-10.638	-20.251	97.16515	-63.8	8.8	-80.7	28.0	1.58046	0.857	-86.0	67.9	38.0	31.4	29.4	6.15513	15-16

JULY 31, 1964 13 HR 25 MIN 18 SEC 162 MS TAB NO 195 ATLAS PHOTO NO 195 POD SEQUENCE NO 393

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				30.658	71.75166	-10.165	-21.610	1807.207	2.572	-64.821	114.936					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.806	-20.045	88.34191	-61.7	9.9	-82.6	28.3	1.44269	0.804	-90.7	68.1	34.2	36.5	32.9	0.	1-2
3	-10.714	-20.176	85.65449	-62.8	9.4	-81.5	28.2	1.39731	0.831	-88.1	68.0	36.1	33.9	31.3	4.79809	2-3
4	-10.707	-19.948	89.33780	-65.2	10.2	-81.2	27.7	1.45711	0.795	-87.9	68.2	32.3	37.4	35.2	6.79347	3-4
5	-10.906	-19.904	91.43122	-60.7	10.5	-83.7	28.5	1.49153	0.775	-93.6	68.3	32.4	39.2	34.4	6.17487	4-5
6	-10.905	-20.139	87.57170	-58.0	9.6	-83.9	29.0	1.42829	0.812	-93.2	68.1	36.1	35.8	30.5	6.99924	5-6
7	-10.714	-20.176	85.65449	-62.8	9.4	-81.5	28.2	1.39731	0.831	-88.1	68.0	36.1	33.9	31.3	5.88764	6-7
8	-10.638	-20.297	83.39983	-63.7	8.8	-80.7	28.0	1.35656	0.857	-86.0	67.9	38.0	31.3	29.4	4.27706	7-8
9	-10.628	-20.081	86.67607	-66.2	9.7	-80.3	27.6	1.41247	0.821	-85.6	68.1	34.3	34.9	33.4	6.43195	8-9
10	-10.616	-19.846	90.65459	-68.3	10.6	-79.9	27.1	1.47345	0.785	-85.1	68.3	30.6	38.6	37.4	7.00928	9-10
11	-10.803	-19.803	92.48824	-64.0	10.8	-82.3	27.9	1.50702	0.767	-90.7	68.4	30.4	40.1	36.9	5.79918	10-11
12	-11.017	-19.752	95.01453	-59.7	11.1	-85.0	28.7	1.54468	0.747	-96.9	68.4	30.7	42.0	35.6	6.65936	11-12
13	-11.011	-20.003	90.65093	-57.1	10.2	-85.1	29.2	1.47661	0.783	-96.2	68.2	34.4	38.6	31.8	7.45107	12-13
14	-11.006	-20.231	87.05730	-54.1	9.3	-85.2	29.6	1.41435	0.820	-95.7	68.0	38.1	35.3	27.9	6.80712	13-14
15	-10.810	-20.267	84.92844	-58.9	9.0	-82.8	28.8	1.38364	0.840	-90.6	67.9	37.9	33.1	29.0	6.03937	14-15
16	-10.638	-20.297	83.39983	-63.7	8.8	-80.7	28.0	1.35656	0.857	-86.0	67.9	38.0	31.3	29.4	5.28265	15-16

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JULY 31, 1964 13 HR 25 MIN 23 SEC 262 MS TAB NO 196 ATLAS PHOTO NO 196 POD SEQUENCE NO 395

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LCN	R	V	PTH	AZ
				25.538				59.82446	-10.240	-21.445	1795.280	2.579	-64.714	114.905
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.778	-20.133	73.70250	-61.6	9.9	-82.6	26.4	1.20361	0.804	-90.7	68.1	34.2 36.4	32.9	0.
3	-10.701	-20.243	71.46629	-62.7	9.3	-81.5	28.2	1.16586	0.832	-88.1	67.9	36.1 33.8	31.2	3.99987
4	-10.695	-20.053	74.52907	-65.1	10.2	-81.2	27.8	1.21558	0.796	-87.9	68.1	32.3 37.3	35.1	5.66225
5	-10.861	-20.016	76.27051	-60.7	10.5	-83.7	28.5	1.24421	0.777	-93.6	68.2	32.4 39.1	34.3	5.14946
6	-10.861	-20.212	73.06235	-58.0	9.6	-83.9	28.9	1.19164	0.813	-93.2	68.0	36.1 35.7	30.4	5.83271
7	-10.701	-20.243	71.46629	-62.7	9.3	-81.5	28.2	1.16586	0.832	-88.1	67.9	36.1 33.8	31.2	4.91110
8	-10.638	-20.344	69.58848	-63.7	8.8	-80.6	28.1	1.13190	0.858	-86.0	67.8	38.0 31.3	29.4	3.56604
9	-10.629	-20.164	72.31494	-66.2	9.7	-80.3	27.6	1.17844	0.822	-85.6	68.0	34.3 34.8	33.3	5.36292
10	-10.619	-19.968	75.62118	-68.2	10.5	-79.9	27.2	1.22911	0.786	-85.1	68.2	30.6 38.5	37.2	5.84017
11	-10.775	-19.932	77.14719	-64.0	10.8	-82.4	27.9	1.25705	0.768	-90.7	68.2	30.4 40.0	36.8	4.83623
12	-10.953	-19.890	79.74577	-59.7	11.1	-84.9	28.7	1.28849	0.748	-96.9	68.3	30.7 41.8	35.5	5.55132
13	-10.949	-20.098	75.62740	-57.1	10.2	-85.1	29.1	1.23182	0.785	-96.2	68.1	34.4 38.5	31.7	6.20554
14	-10.945	-20.289	72.63378	-54.1	9.3	-85.2	29.6	1.18003	0.820	-95.7	67.9	38.1 35.2	27.9	5.67398
15	-10.761	-20.318	70.86252	-58.9	9.0	-82.8	28.8	1.15465	0.840	-90.6	67.9	37.9 33.0	28.9	5.03728
16	-10.638	-20.344	69.58848	-63.7	8.8	-80.6	28.1	1.13190	0.858	-86.0	67.8	38.0 31.3	29.4	4.40738

JULY 31, 1964 13 HR 25 MIN 28 SEC 381 MS TAB NO 197 ATLAS PHOTO NO 197 POD SEQUENCE NO 397

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LCN	R	V	PTH	AZ
				20.415				47.87518	-10.316	-21.278	1783.330	2.586	-64.606	114.874
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.749	-20.223	59.01803	-61.6	9.9	-82.5	28.4	0.96361	0.805	-90.7	68.0	34.2 36.4	32.8	0.
3	-10.688	-20.310	57.23212	-62.7	9.3	-81.5	28.2	0.93365	0.832	-88.0	67.9	36.1 33.7	31.1	3.20035
4	-10.682	-20.158	59.67647	-65.1	10.2	-81.1	27.8	0.97333	0.797	-87.9	68.0	32.3 37.2	35.0	4.52970
5	-10.815	-20.129	61.06684	-60.6	10.5	-83.7	28.5	0.99619	0.778	-93.6	68.1	32.4 39.0	34.2	4.12173
6	-10.815	-20.286	58.50739	-58.0	9.6	-83.9	28.9	0.95425	0.814	-93.2	67.9	36.1 35.6	30.4	4.66522
7	-10.688	-20.310	57.23212	-62.7	9.3	-81.5	28.2	0.93365	0.832	-88.0	67.9	36.1 33.7	31.1	3.93191
8	-10.637	-20.391	55.73107	-63.7	8.8	-80.6	28.1	0.90650	0.858	-86.0	67.8	38.0 31.3	29.3	2.85508
9	-10.630	-20.247	57.90874	-66.1	9.7	-80.2	27.7	0.94368	0.823	-85.6	67.9	34.3 34.8	33.2	4.29183
10	-10.622	-20.090	60.54560	-68.1	10.5	-79.8	27.3	0.98469	0.787	-85.1	68.1	30.6 38.4	37.1	4.67049
11	-10.747	-20.062	61.76472	-64.0	10.8	-82.2	28.0	1.00641	0.770	-90.7	68.1	30.4 39.8	36.7	3.87115
12	-10.889	-20.028	63.43788	-59.7	11.0	-84.9	28.7	1.03146	0.750	-96.9	68.2	30.7 41.7	35.3	4.44156
13	-10.886	-20.195	60.55017	-57.1	10.1	-85.1	29.1	0.98631	0.786	-96.2	68.0	34.4 38.4	31.6	4.96050
14	-10.881	-20.348	58.16468	-54.2	9.2	-85.2	29.5	0.94496	0.821	-95.7	67.9	38.1 35.1	27.8	4.53939
15	-10.752	-20.371	56.75024	-58.9	9.0	-82.8	28.8	0.92470	0.841	-90.6	67.8	37.9 33.0	28.9	4.03245
16	-10.637	-20.391	55.73107	-63.7	8.8	-80.6	28.1	0.90650	0.858	-86.0	67.8	38.0 31.3	29.3	3.52944

JULY 31, 1964 13 HR 25 MIN 33 SEC 501 MS TAB NO 198 ATLAS PHOTO NO 198 POD SEQUENCE NO 399

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				15.298		35.90401	-10.394	-21.109	1771.359	2.593	-64.496	114.842		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.720	-20.313	44.28875	-61.6	9.9	-82.5	28.4	0.72327	0.806	-90.7	67.9	34.2 36.3	32.7	0.
3	-10.674	-20.379	42.95204	-62.7	9.3	-81.5	28.3	0.70069	0.833	-88.0	67.8	36.1 33.7	31.0	2.39972
4	-10.670	-20.265	44.78007	-65.0	10.2	-81.1	27.9	0.73037	0.798	-87.9	67.9	32.3 37.1	34.9	3.39582
5	-10.770	-20.243	45.82065	-60.6	10.4	-83.6	28.6	0.74748	0.775	-93.5	67.9	32.4 38.9	34.1	3.09185
6	-10.770	-20.361	43.90727	-58.0	9.5	-83.9	28.9	0.71613	0.814	-93.2	67.8	36.1 35.6	30.3	3.49682
7	-10.674	-20.379	42.95204	-62.7	9.3	-81.5	28.3	0.70069	0.833	-88.0	67.8	36.1 33.7	31.0	2.95023
8	-10.636	-20.439	41.82756	-63.6	8.8	-80.6	28.2	0.68035	0.859	-86.0	67.7	38.0 31.2	29.3	2.14162
9	-10.630	-20.331	43.45736	-56.0	9.7	-80.2	27.6	0.70818	0.824	-85.6	67.8	34.3 34.7	33.1	3.21869
10	-10.626	-20.214	45.42827	-68.1	10.5	-79.8	27.4	0.73838	0.788	-85.1	68.0	30.6 38.2	37.0	3.50016
11	-10.718	-20.192	46.34047	-63.9	10.7	-82.2	28.1	0.75509	0.771	-90.7	68.0	30.4 39.7	36.5	2.90389
12	-10.425	-20.168	47.59148	-59.7	11.0	-84.9	28.7	0.77311	0.752	-96.9	68.0	30.7 41.5	35.2	3.33044
13	-10.823	-20.292	45.43494	-57.1	10.1	-85.1	29.1	0.74010	0.787	-96.2	67.9	34.4 38.3	31.5	3.71595
14	-10.820	-20.407	43.65072	-54.2	9.2	-85.2	29.5	0.70917	0.822	-95.7	67.8	38.1 35.1	27.8	3.40334
15	-10.722	-20.424	42.59187	-58.9	9.0	-82.8	28.8	0.69460	0.841	-90.6	67.8	37.9 32.9	28.8	3.02540
16	-10.636	-20.439	41.82756	-63.6	8.8	-80.6	28.2	0.68035	0.859	-86.0	67.7	38.0 31.2	29.3	2.68867

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JULY 31, 1964 13 HR 25 MIN 38 SEC 621 MS TAB NO 199 ATLAS PHOTO NO 199 POD SEQUENCE NO 401

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				10.178	23.91034	-10.472	-20.937	1759.366	2.600	-64.386	114.809					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.690	-20.404	29.51313	-61.6	9.9	-82.5	28.4	0.48197	0.807	-90.7	67.8	34.2	36.2	32.6	0.	1- 2
3	-10.650	-20.448	28.62474	-62.6	9.3	-81.4	28.3	0.46697	0.834	-88.0	67.7	36.1	33.6	31.0	1.59791	2- 3
4	-10.657	-20.372	29.85859	-65.0	10.2	-81.1	28.0	0.48667	0.799	-87.8	67.8	32.3	37.0	34.8	2.26062	3- 4
5	-10.724	-20.358	30.53023	-60.6	10.4	-83.6	28.6	0.49805	0.781	-93.5	67.8	32.4	36.8	34.0	2.05963	4- 5
6	-10.723	-20.436	29.26009	-58.0	9.5	-83.9	28.9	0.47723	0.815	-93.2	67.8	36.1	35.5	30.2	2.32748	5- 6
7	-10.660	-20.448	28.62474	-62.6	9.3	-81.4	28.3	0.46697	0.834	-88.0	67.7	36.1	33.6	31.0	1.96575	6- 7
8	-10.634	-20.488	27.87671	-63.5	8.8	-80.6	28.2	0.45343	0.859	-86.0	67.7	38.0	31.2	29.2	1.42654	7- 8
9	-10.631	-20.416	28.95362	-66.0	9.7	-80.2	27.9	0.47193	0.824	-85.6	67.8	34.3	34.6	33.0	2.14349	8- 9
10	-10.627	-20.336	30.26775	-68.0	10.5	-79.8	27.5	0.49196	0.790	-85.1	67.8	30.6	38.1	36.9	2.32930	9-10
11	-10.689	-20.324	30.87470	-63.9	10.7	-82.2	28.1	0.50308	0.773	-90.7	67.9	30.4	39.6	36.4	1.93447	10-11
12	-10.760	-20.307	31.70462	-59.6	10.9	-84.8	28.7	0.51550	0.753	-96.9	67.9	30.7	41.4	35.0	2.21755	11-12
13	-10.759	-20.391	30.27456	-57.1	10.0	-85.0	29.1	0.49315	0.788	-96.2	67.8	34.4	38.1	31.4	2.47187	12-13
14	-10.757	-20.467	29.08956	-54.2	9.2	-85.2	29.4	0.47260	0.823	-95.7	67.7	38.1	35.0	27.7	2.26581	13-14
15	-10.692	-20.478	28.38571	-58.8	9.0	-82.8	28.8	0.46252	0.842	-90.6	67.7	37.9	32.9	28.8	2.01558	14-15
16	-10.634	-20.488	27.87671	-63.5	8.8	-80.6	28.2	0.45343	0.859	-86.0	67.7	38.0	31.2	29.2	1.76510	15-16

JULY 31, 1964 13 HR 25 MIN 43 SEC 741 MS TAB NO 200 ATLAS PHOTO NO 200 POD SEQUENCE NO 403

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				5.058	11.89272	-10.551	-20.763	1747.349	2.608	-64.273	114.776					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.660	-20.496	14.69023	-61.5	9.8	-82.5	28.5	0.23990	0.808	-90.7	67.7	34.2	36.1	32.5	0.	1- 2
3	-10.645	-20.518	14.24922	-62.6	9.3	-81.4	28.4	0.23245	0.834	-88.0	67.7	36.1	33.5	30.9	0.79467	2- 3
4	-10.644	-20.480	14.85127	-64.9	10.2	-81.1	28.0	0.24223	0.800	-87.8	67.7	32.3	36.9	34.7	1.12409	3- 4
5	-10.677	-20.473	15.19463	-60.6	10.4	-83.6	28.6	0.24787	0.782	-93.5	67.7	32.4	38.6	33.8	1.02484	4- 5
6	-10.677	-20.512	14.56486	-56.0	9.5	-83.8	28.9	0.23755	0.816	-93.2	67.7	36.1	35.4	30.1	1.15713	5- 6
7	-10.645	-20.518	14.24922	-62.6	9.3	-81.4	28.4	0.23245	0.834	-88.0	67.7	36.1	33.5	30.9	0.97828	6- 7
8	-10.632	-20.538	13.87755	-63.5	8.8	-80.6	28.3	0.22573	0.859	-86.0	67.6	38.0	31.1	29.2	0.70979	7- 8
9	-10.631	-20.502	14.41518	-65.9	9.7	-80.2	27.9	0.23491	0.825	-85.6	67.7	34.3	34.5	33.0	1.06623	8- 9
10	-10.629	-20.464	15.06350	-67.9	10.5	-79.7	27.6	0.24484	0.791	-85.1	67.7	30.6	38.0	36.7	1.15785	9-10
11	-10.667	-20.456	15.36494	-63.8	10.7	-82.1	28.2	0.25036	0.774	-90.7	67.7	30.4	39.4	36.2	0.96248	10-11
12	-10.695	-20.448	15.77637	-59.6	10.9	-84.8	28.7	0.25652	0.755	-96.8	67.7	30.7	41.2	34.9	1.10298	11-12
13	-10.694	-20.489	15.06805	-57.1	10.0	-85.0	29.1	0.24545	0.789	-96.2	67.7	34.4	38.0	31.3	1.22821	12-13
14	-10.694	-20.527	14.48021	-54.2	9.1	-85.2	29.4	0.23525	0.823	-95.7	67.7	38.1	34.9	27.6	1.12677	13-14
15	-10.661	-20.553	14.13072	-58.8	9.0	-82.8	28.8	0.23025	0.842	-90.6	67.7	37.9	32.8	28.7	1.00309	14-15
16	-10.632	-20.538	13.87755	-63.5	8.8	-80.6	28.3	0.22573	0.859	-86.0	67.6	38.0	31.1	29.2	0.87864	15-16

TIME- AND CAMERA-DEPENDENT PARAMETERS

RA-VII CAMERA P1

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TAB NO 1 ATLAS PHOTO NO 1 POD SEQUENCE NO 17														
JULY 31, 1964 13 HR 12 MIN 20 SEC 381 MS														
TRAJECTORY DATA														
SEC TO IMPACT ALT LAT LON R V PTH AZ														
808.419 1701.69440 -4.104 -34.169 3437.150 2.010 -73.546 116.824														
PHOTO DATA														
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-13.719	-18.953	1862.42825	-51.0	12.4	-80.4	39.0	17.89920	0.825	-89.2	69.4	39.7	34.4	28.3
3	-13.151	-20.447	1837.09035	-50.0	11.5	-79.9	39.6	17.65154	0.851	-88.5	67.9	40.8	31.7	25.8
4	-12.970	-17.729	1874.13393	-54.8	12.6	-80.6	36.7	18.00662	0.813	-88.4	70.5	38.6	35.6	30.8
5	-14.350	-17.370	1891.56551	-51.7	13.5	-81.0	38.6	18.17466	0.796	-89.9	71.0	38.5	37.3	30.9
6	-14.454	-20.153	1852.82373	-47.0	12.3	-80.1	41.4	17.80193	0.835	-89.9	68.3	40.7	33.4	25.8
7	-13.151	-20.447	1837.09035	-50.0	11.5	-79.9	39.6	17.65154	0.851	-88.5	67.9	40.8	31.7	25.8
JULY 31, 1964 13 HR 12 MIN 42 SEC 219 MS														
TAB NO 2 ATLAS PHOTO NO 2 POD SEQUENCE NO 43														
TRAJECTORY DATA														
SEC TO IMPACT ALT LAT LON R V PTH AZ														
786.580 1659.51370 -4.198 -33.981 3394.969 2.019 -73.405 116.800														
PHOTO DATA														
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-13.688	-18.941	1818.34560	-51.0	12.4	-80.4	39.0	17.47553	0.825	-89.2	69.4	39.7	34.4	28.3
3	-13.133	-20.400	1793.59195	-50.1	11.5	-79.9	39.5	17.23359	0.851	-88.5	67.9	40.8	31.7	25.8
4	-12.956	-17.746	1829.77032	-54.8	12.6	-80.6	36.7	17.58038	0.814	-88.4	70.5	38.6	35.6	30.8
5	-14.303	-17.396	1846.76927	-51.7	13.5	-81.0	38.5	17.74444	0.796	-89.9	71.0	38.6	37.2	30.9
6	-14.405	-20.113	1808.94397	-47.1	12.2	-80.1	41.3	17.38033	0.835	-89.9	68.4	40.8	33.4	25.8
7	-13.133	-20.400	1793.59195	-50.1	11.5	-79.9	39.5	17.23359	0.851	-88.5	67.9	40.8	31.7	25.8
JULY 31, 1964 13 HR 13 MIN 2 SEC 378 MS														
TAB NO 3 ATLAS PHOTO NO 3 POD SEQUENCE NO 67														
TRAJECTORY DATA														
SEC TO IMPACT ALT LAT LON R V PTH AZ														
766.421 1620.44031 -4.288 -33.804 3355.896 2.027 -73.271 116.777														
PHOTO DATA														
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-13.659	-18.925	1777.55890	-51.0	12.4	-80.4	39.0	17.08355	0.825	-89.2	69.4	39.7	34.4	28.3
3	-13.116	-20.351	1753.33740	-50.1	11.5	-79.9	39.5	16.84661	0.851	-88.5	68.0	40.8	31.7	25.9
4	-12.943	-17.757	1789.72908	-54.7	12.6	-80.6	36.7	17.18605	0.814	-88.4	70.5	38.6	35.6	30.8
5	-14.260	-17.415	1805.33376	-51.7	13.5	-81.0	38.5	17.34631	0.797	-89.9	70.9	38.6	37.2	30.8
6	-14.360	-20.070	1768.34113	-47.2	12.2	-80.2	41.3	16.99022	0.835	-89.9	68.4	40.8	33.4	25.9
7	-13.116	-20.351	1753.33740	-50.1	11.5	-79.9	39.5	16.84661	0.851	-88.5	68.0	40.8	31.7	25.9
JULY 31, 1964 13 HR 13 MIN 20 SEC 857 MS														
TAB NO 4 ATLAS PHOTO NO 4 POD SEQUENCE NO 89														
TRAJECTORY DATA														
SEC TO IMPACT ALT LAT LON R V PTH AZ														
747.942 1584.50473 -4.372 -33.637 3319.960 2.035 -73.146 116.755														
PHOTO DATA														
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-13.631	-18.916	1739.92757	-51.1	12.4	-80.4	38.9	16.72188	0.825	-89.2	69.4	39.7	34.4	28.3
3	-13.100	-20.312	1716.20619	-50.2	11.5	-79.9	39.4	16.49003	0.850	-88.5	68.0	40.8	31.8	25.9
4	-12.931	-17.773	1750.85677	-54.7	12.6	-80.6	36.7	16.82218	0.814	-88.4	70.5	38.6	35.5	30.7
5	-14.220	-17.438	1787.09505	-51.8	13.4	-81.0	38.5	16.97890	0.797	-89.9	70.9	38.6	37.2	30.8
6	-14.317	-20.037	1730.88626	-47.2	12.2	-80.2	41.2	16.63036	0.835	-89.9	68.4	40.8	33.4	25.9
7	-13.100	-20.312	1716.20619	-50.2	11.5	-79.9	39.4	16.49003	0.850	-88.5	68.0	40.8	31.8	25.9
JULY 31, 1964 13 HR 13 MIN 42 SEC 696 MS														
TAB NO 5 ATLAS PHOTO NO 5 POD SEQUENCE NO 115														
TRAJECTORY DATA														
SEC TO IMPACT ALT LAT LON R V PTH AZ														
726.104 1541.88690 -4.473 -33.435 3277.342 2.045 -72.995 116.729														
PHOTO DATA														
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-13.596	-18.907	1695.22859	-51.1	12.4	-80.4	38.9	16.29229	0.825	-89.2	69.4	39.7	34.4	28.3
3	-13.074	-20.267	1672.10374	-50.2	11.5	-80.0	39.4	16.06628	0.850	-88.5	68.1	40.8	31.8	25.9
4	-12.914	-17.793	1705.87161	-54.7	12.6	-80.6	36.7	16.38996	0.814	-88.4	70.4	38.6	35.5	30.7
5	-14.170	-17.468	1721.67371	-51.8	13.4	-81.0	38.5	16.54248	0.796	-89.9	70.9	38.6	37.1	30.8
6	-14.265	-19.999	1666.98618	-47.3	12.2	-80.2	41.1	16.20291	0.835	-89.9	68.5	40.8	33.4	25.9
7	-13.074	-20.267	1672.10374	-50.2	11.5	-80.0	39.4	16.06628	0.850	-88.5	68.1	40.8	31.8	25.9
JULY 31, 1964 13 HR 13 MIN 59 SEC 495 MS														
TAB NO 6 ATLAS PHOTO NO 6 POD SEQUENCE NO 135														
TRAJECTORY DATA														
SEC TO IMPACT ALT LAT LON R V PTH AZ														
709.305 1508.99237 -4.553 -33.276 3244.448 2.052 -72.877 116.709														
PHOTO DATA														
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-13.568	-18.862	1661.21802	-51.2	12.4	-80.5	38.8	15.96543	0.825	-89.2	69.5	39.7	34.4	28.4
3	-13.060	-20.197	1638.49281	-50.3	11.5	-80.0	39.3	15.74333	0.849	-88.5	68.1	40.8	31.9	26.0
4	-12.894	-17.771	1671.69225	-54.7	12.6	-80.6	36.7	16.06157	0.814	-88.4	70.5	38.6	35.6	30.7
5	-14.129	-17.451	1687.17555	-51.8	13.4	-81.0	38.4	16.21101	0.797	-89.9	70.9	38.6	37.1	30.8
6	-14.222	-19.934	1652.50229	-47.4	12.2	-80.3	41.0	15.87724	0.834	-89.9	68.5	40.8	33.5	26.0
7	-13.060	-20.197	1638.49281	-50.3	11.5	-80.0	39.3	15.74333	0.849	-88.5	68.1	40.8	31.9	26.0

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JULY 31, 1964 13 HR 14 MIN 16 SEC 294 MS

TAB NO 7

ATLAS PHOTO NO 7

POD SEQUENCE NO 155

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										692.506	1475.99896	-4.634	-33.114	3211.454	2.060	-72.756	116.688
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-13.537	-18.813	1627.13644	-51.3	12.4	-80.5	38.7	15.63788	0.824	-89.2	69.5	39.6	34.5	28.5	0.	1- 2	
3	-13.040	-20.122	1604.80640	-50.4	11.6	-80.0	39.2	15.41966	0.849	-88.6	68.2	40.7	32.0	26.1	41.40012	2- 3	
4	-12.882	-17.744	1637.44751	-54.8	12.6	-80.6	36.6	15.73254	0.813	-88.4	70.5	38.5	35.6	30.8	70.35116	3- 4	
5	-14.087	-17.431	1652.61243	-51.9	13.4	-81.0	38.3	15.87891	0.797	-89.9	70.9	38.5	37.2	30.9	37.64711	4- 5	
6	-14.178	-19.863	1618.53082	-47.6	12.3	-80.3	40.8	15.55824	0.834	-89.9	68.6	40.7	33.5	26.1	11.50158	5- 6	
7	-13.040	-20.122	1604.80640	-50.4	11.6	-80.0	39.2	15.41966	0.849	-88.6	68.2	40.7	32.0	26.1	35.29756	6- 7	

JULY 31, 1964 13 HR 14 MIN 33 SEC 93 MS

TAB NO 8

ATLAS PHOTO NO 8

POD SEQUENCE NO 175

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										675.707	1442.90503	-4.717	-32.948	3178.360	2.067	-72.634	116.667
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-13.506	-18.781	1592.68222	-51.3	12.5	-80.5	38.7	15.30675	0.824	-89.2	69.6	39.6	34.5	28.5	0.	1- 2	
3	-13.020	-20.063	1570.77724	-50.5	11.6	-80.0	39.1	15.09269	0.848	-88.6	68.3	40.7	32.0	26.2	40.54877	2- 3	
4	-12.865	-17.734	1602.80727	-54.8	12.6	-80.6	36.6	15.39972	0.813	-88.4	70.5	38.5	35.6	30.8	68.89823	3- 4	
5	-14.044	-17.427	1617.64392	-52.0	13.4	-81.1	38.3	15.54292	0.797	-89.9	70.9	38.5	37.2	30.9	36.84758	4- 5	
6	-14.133	-19.869	1584.20880	-47.7	12.3	-80.3	40.7	15.22108	0.833	-89.9	68.6	40.7	33.6	26.2	70.02864	5- 6	
7	-13.020	-20.063	1570.77724	-50.5	11.6	-80.0	39.1	15.09269	0.848	-88.6	68.3	40.7	32.0	26.2	34.54836	6- 7	

JULY 31, 1964 13 HR 14 MIN 49 SEC 892 MS

TAB NO 9

ATLAS PHOTO NO 9

POD SEQUENCE NO 195

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										658.908	1469.70874	-4.802	-32.779	3145.164	2.075	-72.508	116.645
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-13.473	-18.756	1557.97939	-51.4	12.5	-80.5	38.6	14.97324	0.823	-89.2	69.6	39.6	34.6	28.6	0.	1- 2	
3	-12.998	-20.011	1536.51410	-50.6	11.6	-80.1	39.0	14.76348	0.848	-88.6	68.3	40.7	32.1	26.3	39.68521	2- 3	
4	-12.846	-17.732	1567.90805	-54.8	12.6	-80.6	36.6	15.06441	0.813	-88.4	70.5	38.5	35.7	30.9	67.42535	3- 4	
5	-14.000	-17.432	1582.41116	-52.0	13.4	-81.1	38.2	15.20439	0.797	-89.9	70.9	38.5	37.2	30.9	36.04092	4- 5	
6	-14.087	-19.762	1549.64835	-47.8	12.3	-80.4	40.6	14.88902	0.833	-89.9	68.7	40.7	33.6	26.3	68.52896	5- 6	
7	-12.998	-20.011	1536.51410	-50.6	11.6	-80.1	39.0	14.76348	0.848	-88.6	68.3	40.7	32.1	26.3	33.79289	6- 7	

JULY 31, 1964 13 HR 15 MIN 5 SEC 11 MS

TAB NO 10

ATLAS PHOTO NO 10

POD SEQUENCE NO 213

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										643.789	1379.74292	-4.860	-32.623	3115.198	2.082	-72.394	116.625
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-13.443	-18.736	1526.59445	-51.5	12.5	-80.5	38.5	14.67161	0.823	-89.2	69.6	39.6	34.6	28.6	0.	1- 2	
3	-12.977	-19.966	1505.53021	-50.7	11.6	-80.1	39.0	14.46577	0.847	-88.6	68.4	40.7	32.1	26.3	38.90240	2- 3	
4	-12.829	-17.732	1536.34369	-54.9	12.6	-80.6	36.6	14.76114	0.813	-88.4	70.5	38.5	35.7	30.9	66.09094	3- 4	
5	-13.959	-17.438	1550.54430	-52.1	13.4	-81.1	38.2	14.89820	0.797	-89.9	70.9	38.5	37.2	30.9	35.31099	4- 5	
6	-14.044	-19.722	1518.39473	-47.9	12.3	-80.4	40.5	14.58873	0.833	-89.9	68.7	40.7	33.6	26.3	67.17022	5- 6	
7	-12.977	-19.966	1505.53021	-50.7	11.6	-80.1	39.0	14.46577	0.847	-88.6	68.4	40.7	32.1	26.3	33.10953	6- 7	

JULY 31, 1964 13 HR 15 MIN 21 SEC 810 MS

TAB NO 11

ATLAS PHOTO NO 11

POD SEQUENCE NO 233

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										626.990	1346.34720	-4.968	-32.447	3081.802	2.091	-72.264	116.602
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-13.407	-18.716	1491.56356	-51.5	12.5	-80.6	38.5	14.33474	0.823	-89.2	69.6	39.6	34.6	28.6	0.	1- 2	
3	-12.952	-19.918	1470.93130	-50.8	11.6	-80.1	38.9	14.13333	0.847	-88.6	68.4	40.7	32.2	26.4	38.02606	2- 3	
4	-12.807	-17.735	1501.09039	-54.9	12.6	-80.6	36.5	14.42243	0.813	-88.5	70.5	38.5	35.7	30.9	64.59790	3- 4	
5	-13.911	-17.448	1514.95166	-52.1	13.4	-81.1	38.1	14.55622	0.797	-89.9	70.9	38.5	37.2	30.9	34.49527	4- 5	
6	-13.994	-19.680	1483.49316	-48.0	12.3	-80.4	40.4	14.25340	0.832	-89.9	68.8	40.7	33.7	26.4	65.64984	5- 6	
7	-12.952	-19.918	1470.93130	-50.8	11.6	-80.1	38.9	14.13333	0.847	-88.6	68.4	40.7	32.2	26.4	32.34576	6- 7	

JULY 31, 1964 13 HR 15 MIN 35 SEC 249 MS

TAB NO 12

ATLAS PHOTO NO 12

POD SEQUENCE NO 249

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										613.550	1319.55328	-5.040	-32.302	3055.009	2.097	-72.158	116.584
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-13.376	-18.704	1463.32813	-51.6	12.5	-80.6	38.4	14.06357	0.823	-89.2	69.6	39.5	34.6	28.7	0.	1- 2	
3	-12.929	-19.883	1443.08571	-50.8	11.6	-80.1	38.8	13.86578	0.846	-88.6	68.4	40.7	32.2	26.5	37.31739	2- 3	
4	-12.787	-17.741	1472.71059	-54.9	12.6	-80.6	36.5	14.14975	0.813	-88.5	70.5	38.5	35.7	30.9	63.39268	3- 4	
5	-13.870	-17.460	1486.29425	-52.2	13.4	-81.1	38.1	14.28087	0.797	-89.9	70.9	38.4	37.1	30.9	33.83660	4- 5	
6	-13.952	-19.649	1455.39995	-48.1	12.3	-80.5	40.3	13.98348	0.832	-89.9	68.8	40.6	33.7	26.4	64.42209	5- 6	
7	-12.929	-19.883	1443.08571	-50.8	11.6	-80.1	38.8	13.86578	0.846	-88.6	68.4	40.7	32.2	26.5	31.72965	6- 7	

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JULY 31, 1964 13 HR 15 MIN 50 SEC 368 MS TAB NO 13 ATLAS PHOTO NO 13 POD SEQUENCE NO 267

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				598.431	1269.32639	-5.122	-32.137	3024.782	2.105	-72.037	116.562				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-13.336	-18.692	1431.40108	-51.7	12.4	-80.6	38.3	13.75673	0.823	-89.2	69.6	39.5	34.6	28.7	0.
3	-12.899	-19.846	1411.58246	-10.9	11.6	-80.1	38.7	13.56308	0.846	-88.6	68.5	40.6	32.2	26.5	36.51268
4	-12.760	-17.751	1440.59972	-54.9	12.6	-80.6	36.5	13.84122	0.813	-88.5	70.5	38.4	35.7	30.9	62.02709
5	-13.819	-17.476	1453.86199	-52.3	13.3	-81.1	38.0	13.96925	0.798	-89.9	70.9	38.4	37.1	30.9	33.08879
6	-13.894	-19.618	1423.61072	-48.3	12.2	-80.5	40.2	13.67805	0.832	-89.9	68.8	40.6	33.7	26.5	63.03059
7	-12.894	-19.846	1411.58246	-50.9	11.6	-80.1	38.7	13.56308	0.846	-88.6	68.5	40.6	32.2	26.5	31.03003

JULY 31, 1964 13 HR 16 MIN 7 SEC 167 MS TAB NO 14 ATLAS PHOTO NO 14 POD SEQUENCE NO 287

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				581.632	1255.63544	-5.215	-31.950	2991.091	2.113	-71.900	116.538				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-13.288	-18.684	1395.69748	-51.8	12.4	-80.6	38.2	13.41360	0.823	-89.2	69.6	39.5	34.6	28.7	0.
3	-12.862	-19.809	1376.35941	-51.0	11.6	-80.2	38.6	13.22465	0.846	-88.6	68.5	40.6	32.2	26.6	35.60926
4	-12.727	-17.766	1404.66715	-55.0	12.6	-80.7	36.4	13.96619	0.813	-88.5	70.5	38.4	35.7	30.9	60.49640
5	-13.759	-17.498	1417.58708	-52.3	13.3	-81.1	37.9	13.62070	0.798	-89.9	70.8	38.4	37.1	30.9	32.25056
6	-13.837	-19.587	1388.06328	-48.4	12.2	-80.5	40.0	13.33651	0.832	-89.9	68.8	40.6	33.7	26.5	61.47041
7	-12.862	-19.809	1376.35941	-51.0	11.6	-80.2	38.6	13.22465	0.846	-88.6	68.5	40.6	32.2	26.6	30.24612

JULY 31, 1964 13 HR 16 MIN 22 SEC 286 MS TAB NO 15 ATLAS PHOTO NO 15 POD SEQUENCE NO 305

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				566.513	1225.21889	-5.301	-31.777	2960.672	2.121	-71.775	116.515				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-13.242	-18.683	1383.31502	-51.9	12.4	-80.6	38.1	13.10238	0.823	-89.2	69.6	39.5	34.6	28.7	0.
3	-12.825	-19.782	1344.42233	-51.1	11.6	-80.2	38.5	12.91778	0.846	-88.6	68.5	40.6	32.3	26.6	34.78481
4	-12.693	-17.786	1372.11148	-55.0	12.5	-80.7	36.4	13.18320	0.813	-88.5	70.5	38.4	35.6	30.9	59.10160
5	-13.702	-17.526	1384.67699	-52.4	13.3	-81.1	37.8	13.30449	0.798	-89.9	70.8	38.4	37.0	30.9	31.48819
6	-13.777	-19.565	1355.82768	-48.5	12.2	-80.6	39.9	13.02679	0.832	-89.9	68.8	40.6	33.7	26.6	60.04829
7	-12.825	-19.782	1344.42233	-51.1	11.6	-80.2	38.5	12.91778	0.846	-88.6	68.5	40.6	32.3	26.6	29.53369

JULY 31, 1964 13 HR 16 MIN 34 SEC 45 MS TAB NO 16 ATLAS PHOTO NO 16 POD SEQUENCE NO 319

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				554.754	1201.49377	-5.369	-31.640	2936.949	2.128	-71.675	116.497				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-13.203	-18.686	1337.38418	-51.9	12.4	-80.6	38.1	12.85693	0.823	-89.2	69.6	39.5	34.6	28.7	0.
3	-12.794	-19.784	1319.46368	-51.2	11.6	-80.2	38.4	12.67778	0.846	-88.6	68.5	40.6	32.3	26.6	34.13783
4	-12.665	-17.805	1366.82929	-55.1	12.5	-80.7	36.3	12.93837	0.813	-88.5	70.4	38.4	35.6	30.9	58.00868
5	-13.694	-17.580	1358.92972	-52.4	13.2	-81.1	37.8	13.07110	0.799	-89.9	70.8	38.4	37.0	30.9	30.89044
6	-13.728	-19.591	1330.61249	-48.6	12.2	-80.6	39.8	12.78452	0.832	-89.9	68.9	40.6	33.7	26.6	58.93370
7	-12.794	-19.784	1319.46368	-51.2	11.6	-80.2	38.4	12.67778	0.846	-88.6	68.5	40.6	32.3	26.6	28.97514

JULY 31, 1964 13 HR 16 MIN 45 SEC 805 MS TAB NO 17 ATLAS PHOTO NO 17 POD SEQUENCE NO 333

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				547.995	1177.71344	-5.438	-31.501	2913.169	2.134	-71.575	116.479				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-13.167	-18.690	1312.53345	-52.0	12.3	-80.7	38.0	12.61434	0.824	-89.2	69.6	39.5	34.6	28.7	0.
3	-12.761	-19.747	1294.36956	-51.3	11.6	-80.2	38.4	12.43666	0.846	-88.6	68.6	40.6	32.3	26.7	33.48636
4	-12.634	-17.822	1321.02615	-55.1	12.5	-80.7	36.3	12.69238	0.814	-88.5	70.4	38.4	35.6	30.9	56.90925
5	-13.604	-17.576	1333.05832	-52.6	13.2	-81.2	37.7	12.80857	0.799	-89.9	70.8	38.4	36.9	30.9	30.28912
6	-13.677	-19.538	1305.27844	-48.7	12.1	-80.6	39.7	12.54112	0.833	-89.9	68.9	40.6	33.7	26.6	57.81235
7	-12.761	-19.747	1294.36956	-51.3	11.6	-80.2	38.4	12.43666	0.846	-88.6	68.6	40.6	32.3	26.7	28.41328

JULY 31, 1964 13 HR 17 MIN 2 SEC 604 MS TAB NO 18 ATLAS PHOTO NO 18 POD SEQUENCE NO 353

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ				
				526.196	1143.64124	-5.539	-31.298	2879.097	2.143	-71.428	116.453				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-13.103	-18.704	1275.91409	-52.1	12.3	-80.7	37.9	12.26240	0.824	-89.2	69.6	39.5	34.5	28.7	0.
3	-12.714	-19.732	1258.25325	-51.4	11.5	-80.3	38.2	12.08963	0.846	-88.6	68.6	40.6	32.2	26.7	32.54367
4	-12.591	-17.864	1284.17783	-55.2	12.5	-80.7	36.2	12.33835	0.814	-88.5	70.4	38.4	35.5	30.8	55.31811
5	-13.533	-17.623	1295.82385	-52.6	13.1	-81.2	37.6	12.45076	0.800	-89.9	70.7	38.4	36.9	30.8	29.42366
6	-13.604	-19.530	1268.83727	-48.9	12.1	-80.7	39.6	12.19099	0.833	-89.9	68.9	40.6	33.6	26.6	56.18934
7	-12.714	-19.732	1258.25325	-51.4	11.5	-80.3	38.2	12.08963	0.846	-88.6	68.6	40.6	32.2	26.7	27.60504

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JULY 31, 1964 13 HR 17 MIN 16 SEC 43 MS TAB NO 19 ATLAS PHOTO NO 19 POD SEQUENCE NO 369

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

512.756 1116.29672 -5.621 -31.132 2651.752 2.151 -71.308 116.431

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-13.056	-18.723	1246.40115	-52.2	12.3	-60.7	37.8	11.97876	0.825	-89.2	69.6	39.5	34.5	28.7	0.	1-2
3	-12.676	-19.727	1229.16937	-51.5	11.5	-60.3	38.2	11.81038	0.846	-88.6	68.6	40.6	32.2	26.7	31.77992	2-3
4	-12.555	-17.903	1234.47270	-55.2	12.4	-80.7	36.2	12.05294	0.815	-88.5	70.3	38.4	35.5	30.8	54.02870	3-4
5	-13.476	-17.668	1265.80801	-52.7	13.1	-81.2	37.5	12.16235	0.801	-89.9	70.7	38.4	36.8	30.8	28.72637	4-5
6	-13.545	-19.530	1239.47604	-49.0	12.1	-80.7	39.5	11.90889	0.833	-89.9	68.9	40.6	33.6	26.6	56.87405	5-6
7	-12.676	-19.727	1229.16937	-51.5	11.5	-80.3	38.2	11.81038	0.846	-88.6	68.6	40.6	32.2	26.7	26.95416	6-7

JULY 31, 1964 13 HR 17 MIN 27 SEC 802 MS TAB NO 20 ATLAS PHOTO NO 20 POD SEQUENCE NO 383

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

500.997 1092.30646 -5.694 -30.985 2827.762 2.158 -71.202 116.411

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-13.015	-18.738	1220.53470	-52.2	12.2	-80.7	37.8	11.73017	0.825	-89.2	69.6	39.5	34.4	28.7	0.	1-2
3	-12.643	-19.719	1203.67419	-51.6	11.5	-80.3	38.1	11.56541	0.846	-88.6	68.6	40.6	32.2	26.7	31.11311	2-3
4	-12.525	-17.934	1228.44023	-55.3	12.4	-80.7	36.2	11.80282	0.815	-88.5	70.3	38.4	35.4	30.7	52.30190	3-4
5	-13.426	-17.705	1239.50690	-52.8	13.0	-81.2	37.5	11.90964	0.802	-89.9	70.6	38.4	36.7	30.7	28.11671	4-5
6	-13.494	-19.528	1213.74069	-49.1	12.0	-80.7	39.4	11.66163	0.834	-89.9	68.9	40.6	33.5	26.6	53.72514	5-6
7	-12.643	-19.719	1203.67419	-51.6	11.5	-80.3	38.1	11.56541	0.846	-88.6	68.6	40.6	32.2	26.7	26.38474	6-7

JULY 31, 1964 13 HR 17 MIN 41 SEC 241 MS TAB NO 21 ATLAS PHOTO NO 21 POD SEQUENCE NO 399

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

487.558 1064.81424 -5.779 -30.812 2800.270 2.166 -71.078 116.388

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.969	-18.760	1190.78610	-52.3	12.2	-80.7	37.7	11.44424	0.825	-89.2	69.5	39.5	34.4	28.7	0.	1-2
3	-12.605	-19.718	1174.35713	-51.6	11.5	-80.3	38.0	11.28372	0.847	-88.6	68.6	40.6	32.2	26.7	30.34271	2-3
4	-12.491	-17.976	1198.49113	-55.3	12.4	-80.7	36.1	11.51508	0.816	-88.4	70.3	38.4	35.3	30.7	51.59936	3-4
5	-13.369	-17.754	1209.25017	-52.8	13.0	-81.2	37.4	11.61893	0.802	-89.9	70.6	38.4	36.6	30.7	27.41598	4-5
6	-13.435	-19.531	1184.14874	-49.1	12.0	-80.7	39.3	11.37731	0.834	-89.9	68.9	40.6	33.5	26.6	52.39705	5-6
7	-12.605	-19.718	1174.35713	-51.6	11.5	-80.3	38.0	11.28372	0.847	-88.6	68.6	40.6	32.2	26.7	25.73050	6-7

JULY 31, 1964 13 HR 17 MIN 53 SEC 1 MS TAB NO 22 ATLAS PHOTO NO 22 POD SEQUENCE NO 413

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

475.799 1040.69305 -5.854 -30.659 2776.148 2.173 -70.969 116.368

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.927	-18.780	1164.66789	-52.3	12.2	-80.7	37.7	11.19325	0.826	-89.2	69.5	39.5	34.3	28.6	0.	1-2
3	-12.572	-19.716	1148.61967	-51.7	11.4	-80.3	38.0	11.03643	0.847	-88.6	68.6	40.7	32.1	26.7	29.66737	2-3
4	-12.460	-18.013	1172.20172	-55.3	12.3	-80.7	36.1	11.26249	0.816	-88.4	70.2	38.5	35.3	30.7	50.45724	3-4
5	-13.319	-17.796	1182.69246	-52.8	12.9	-81.2	37.4	11.36375	0.803	-89.9	70.5	38.4	36.6	30.6	26.80167	4-5
6	-13.384	-19.534	1158.17126	-49.2	11.9	-80.7	39.2	11.12772	0.835	-89.9	68.8	40.6	33.5	26.6	51.23283	5-6
7	-12.572	-19.716	1148.61967	-51.7	11.4	-80.3	38.0	11.03643	0.847	-88.6	68.6	40.7	32.1	26.7	25.15669	6-7

JULY 31, 1964 13 HR 18 MIN 3 SEC 80 MS TAB NO 23 ATLAS PHOTO NO 23 POD SEQUENCE NO 425

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

465.719 1019.96777 -5.920 -30.525 2755.423 2.179 -70.873 116.350

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.891	-18.797	1142.19429	-52.4	12.1	-80.8	37.6	10.97726	0.826	-89.2	69.5	39.6	34.3	28.6	0.	1-2
3	-12.543	-19.715	1126.47246	-51.7	11.4	-80.4	37.9	10.82363	0.847	-88.6	68.6	40.7	32.1	26.7	29.08599	2-3
4	-12.433	-18.046	1149.57935	-55.3	12.3	-80.7	36.1	11.04514	0.817	-88.4	70.2	38.5	35.2	30.6	49.47436	3-4
5	-13.275	-17.834	1159.83905	-52.9	12.9	-81.2	37.4	11.14417	0.804	-89.9	70.5	38.4	36.5	30.6	26.27293	4-5
6	-13.339	-19.537	1135.81723	-49.3	11.9	-80.8	39.1	10.91294	0.835	-89.9	68.8	40.7	33.4	26.6	50.23102	5-6
7	-12.543	-19.715	1126.47246	-51.7	11.4	-80.4	37.9	10.82363	0.847	-88.6	68.6	40.7	32.1	26.7	24.66287	6-7

JULY 31, 1964 13 HR 18 MIN 16 SEC 519 MS TAB NO 24 ATLAS PHOTO NO 24 POD SEQUENCE NO 441

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

452.280 992.26181 -6.010 -30.344 2727.717 2.187 -70.743 116.325

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.841	-18.823	1112.08360	-52.4	12.1	-80.8	37.6	10.68788	0.827	-89.2	69.5	39.6	34.2	28.6	0.	1-2
3	-12.502	-19.716	1096.80104	-51.8	11.4	-80.4	37.9	10.53853	0.848	-88.6	68.6	40.7	32.1	26.7	28.30605	2-3
4	-12.395	-18.092	1119.26880	-55.4	12.3	-80.7	36.1	10.75391	0.818	-88.4	70.1	38.5	35.2	30.6	48.15639	3-4
5	-13.215	-17.887	1129.21815	-52.9	12.8	-81.2	37.3	10.84995	0.805	-89.9	70.4	38.5	36.4	30.5	25.56430	4-5
6	-13.276	-19.544	1105.86784	-49.4	11.9	-80.8	39.0	10.62519	0.835	-89.9	68.8	40.7	33.4	26.6	48.88756	5-6
7	-12.502	-19.716	1096.80104	-51.8	11.4	-80.4	37.9	10.53853	0.848	-88.6	68.6	40.7	32.1	26.7	24.00087	6-7

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JULY 31, 1964 13 HR 18 MIN 26 SEC 599 MS														
TAB NO 25 ATLAS PHOTO NO 25 POD SEQUENCE NO 453														
TRAJECTORY DATA														
SEC TO IMPACT 442.201 ALT 971.42709 LAT -6.078 LON -30.205 R 2706.882 V 2.193 PTH -70.645 AZ 116.306														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-12.803	-18.845	1089.39827	-52.5	12.0	-80.8	37.5	10.46986	0.827	-89.2	69.5	39.6	34.2	28.5
3	-12.471	-19.719	1074.44759	-51.9	11.4	-80.4	37.8	10.32375	0.848	-88.6	68.6	40.7	32.0	26.7
4	-12.366	-18.128	1096.43175	-55.4	12.2	-80.7	36.1	10.53450	0.818	-88.4	70.1	38.5	35.1	30.5
5	-13.169	-17.928	1106.14804	-53.0	12.8	-81.2	37.3	10.62828	0.805	-89.9	70.4	38.5	36.4	30.5
6	-13.229	-19.550	1063.30553	-49.5	11.8	-80.8	39.0	10.40841	0.836	-89.9	68.8	40.7	33.3	26.6
7	-12.471	-19.719	1074.44759	-51.9	11.4	-80.4	37.8	10.32375	0.848	-88.6	68.6	40.7	32.0	26.7
PT-PT 1-2 2-3 3-4 4-5 5-6 6-7														
JULY 31, 1964 13 HR 18 MIN 36 SEC 678 MS														
TAB NO 26 ATLAS PHOTO NO 26 POD SEQUENCE NO 465														
TRAJECTORY DATA														
SEC TO IMPACT 432.121 ALT 950.54483 LAT -6.147 LON -30.064 R 2686.000 V 2.200 PTH -70.544 AZ 116.287														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-12.764	-18.864	1066.67233	-52.5	12.0	-80.8	37.5	10.25144	0.828	-89.2	69.4	39.6	34.1	28.5
3	-12.439	-19.720	1092.05096	-51.9	11.3	-80.4	37.8	10.10855	0.848	-88.6	68.6	40.7	32.0	26.6
4	-12.337	-18.163	1073.55612	-55.4	12.2	-80.7	36.0	10.31471	0.819	-88.4	70.1	38.5	35.1	30.5
5	-13.123	-17.967	1083.04074	-53.0	12.7	-81.2	37.2	10.40626	0.806	-89.9	70.3	38.5	36.3	30.4
6	-13.182	-19.555	1060.70097	-49.5	11.8	-80.8	38.9	10.19123	0.836	-89.9	68.8	40.7	33.3	26.6
7	-12.439	-19.720	1092.05096	-51.9	11.3	-80.4	37.8	10.10855	0.848	-88.6	68.6	40.7	32.0	26.6
PT-PT 1-2 2-3 3-4 4-5 5-6 6-7														
JULY 31, 1964 13 HR 18 MIN 45 SEC 78 MS														
TAB NO 27 ATLAS PHOTO NO 27 POD SEQUENCE NO 475														
TRAJECTORY DATA														
SEC TO IMPACT 423.722 ALT 933.10602 LAT -6.206 LON -29.945 R 2668.561 V 2.205 PTH -70.460 AZ 116.271														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-12.732	-18.881	1047.67982	-52.6	12.0	-80.8	37.4	10.06891	0.828	-89.2	69.4	39.6	34.1	28.5
3	-12.413	-19.721	1033.33306	-52.0	11.3	-80.4	37.7	9.92871	0.848	-88.6	68.6	40.7	32.0	26.6
4	-12.312	-18.192	1054.43872	-55.4	12.2	-80.7	36.0	10.13103	0.819	-88.4	70.0	38.5	35.0	30.4
5	-13.084	-18.001	1063.73058	-53.0	12.7	-81.2	37.2	10.22072	0.807	-89.9	70.3	38.5	36.2	30.4
6	-13.142	-19.559	1041.81006	-49.6	11.8	-80.8	38.8	10.00973	0.836	-89.9	68.8	40.7	33.2	26.6
7	-12.413	-19.721	1033.33308	-52.0	11.3	-80.4	37.7	9.92871	0.848	-88.6	68.6	40.7	32.0	26.6
PT-PT 1-2 2-3 3-4 4-5 5-6 6-7														
JULY 31, 1964 13 HR 18 MIN 56 SEC 837 MS														
TAB NO 28 ATLAS PHOTO NO 28 POD SEQUENCE NO 489														
TRAJECTORY DATA														
SEC TO IMPACT 411.962 ALT 908.63443 LAT -6.289 LON -29.775 R 2644.090 V 2.213 PTH -70.340 AZ 116.248														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-12.687	-18.908	1020.96662	-52.6	11.9	-80.8	37.4	9.81218	0.829	-89.2	69.4	39.6	34.0	28.5
3	-12.376	-19.725	1007.00851	-52.0	11.3	-80.4	37.6	9.67577	0.849	-88.6	68.6	40.7	32.0	26.6
4	-12.278	-18.236	1027.54707	-55.5	12.1	-80.7	36.0	9.87266	0.820	-88.4	70.0	38.5	34.9	30.4
5	-13.029	-18.051	1036.56874	-53.1	12.7	-81.2	37.1	9.95974	0.808	-89.9	70.3	38.5	36.2	30.3
6	-13.086	-19.569	1015.24281	-49.7	11.7	-80.9	38.8	9.75447	0.837	-89.9	68.8	40.7	33.2	26.5
7	-12.376	-19.725	1007.00851	-52.0	11.3	-80.4	37.6	9.67577	0.849	-88.6	68.6	40.7	32.0	26.6
PT-PT 1-2 2-3 3-4 4-5 5-6 6-7														
JULY 31, 1964 13 HR 19 MIN 6 SEC 916 MS														
TAB NO 29 ATLAS PHOTO NO 29 POD SEQUENCE NO 501														
TRAJECTORY DATA														
SEC TO IMPACT 401.883 ALT 887.60489 LAT -6.361 LON -29.627 R 2623.060 V 2.220 PTH -70.235 AZ 116.227														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-12.647	-18.933	997.95532	-52.7	11.9	-80.8	37.3	9.59103	0.829	-89.2	69.4	39.6	34.0	28.4
3	-12.343	-19.732	984.31881	-52.1	11.3	-80.5	37.6	9.45790	0.849	-88.6	68.6	40.7	31.9	26.6
4	-12.247	-18.277	1004.38017	-55.5	12.1	-80.7	36.0	9.65007	0.821	-88.4	70.0	38.5	34.9	30.3
5	-12.982	-18.096	1013.16964	-53.1	12.6	-81.2	37.1	9.73491	0.806	-89.9	70.2	38.5	36.1	30.3
6	-13.037	-19.579	992.35948	-49.7	11.7	-80.9	38.7	9.53461	0.837	-89.9	68.8	40.7	33.1	26.5
7	-12.343	-19.732	984.33381	-52.1	11.3	-80.5	37.6	9.45790	0.849	-88.6	68.6	40.7	31.9	26.6
PT-PT 1-2 2-3 3-4 4-5 5-6 6-7														
JULY 31, 1964 13 HR 19 MIN 16 SEC 996 MS														
TAB NO 30 ATLAS PHOTO NO 30 POD SEQUENCE NO 513														
TRAJECTORY DATA														
SEC TO IMPACT 391.804 ALT 866.52570 LAT -6.435 LON -29.477 R 2601.981 V 2.226 PTH -70.129 AZ 116.206														
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-12.607	-18.959	974.86746	-52.7	11.9	-80.8	37.3	9.36914	0.830	-89.2	69.3	39.6	33.9	28.4
3	-12.311	-19.739	961.58292	-52.1	11.2	-80.5	37.6	9.23930	0.849	-88.6	68.5	40.7	31.9	26.6
4	-12.217	-18.318	981.13632	-55.5	12.1	-80.7	36.0	9.42675	0.821	-88.4	69.9	38.5	34.8	30.3
5	-12.934	-18.142	989.69405	-53.2	12.6	-81.2	37.1	9.50935	0.809	-89.9	70.2	38.5	36.0	30.2
6	-12.988	-19.590	969.40025	-49.8	11.7	-80.9	38.6	9.31402	0.838	-89.9	68.8	40.7	33.1	26.5
7	-12.311	-19.739	961.58292	-52.1	11.2	-80.5	37.6	9.23930	0.849	-88.6	68.5	40.7	31.9	26.6
PT-PT 1-2 2-3 3-4 4-5 5-6 6-7														

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JULY 31, 1964 13 HR 19 MIN 27 SEC 75 MS TAB NO 31 ATLAS PHOTO NO 31 POD SEQUENCE NO 525

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										381.724	845.39542	-6.510	-29.324	2580.851	2.233	-70.022	116.185
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.567	-18.985	951.71479	-52.7	11.8	-80.8	37.3	9.14662	0.830	-89.2	69.3	39.6	33.9	28.4	0.	1-2	
3	-12.277	-19.745	938.76641	-52.2	11.2	-80.5	37.5	9.02007	0.850	-88.5	68.5	40.8	31.9	26.6	24.15513	2-3	
4	-12.186	-18.359	957.82836	-55.5	12.0	-80.7	35.9	9.20281	0.822	-88.4	69.9	38.6	34.8	30.2	41.13611	3-4	
5	-12.896	-18.188	966.15517	-53.2	12.5	-81.2	37.0	9.28318	0.810	-89.9	70.1	38.5	35.9	30.1	21.80279	4-5	
6	-12.939	-19.601	946.37590	-49.9	11.6	-80.9	38.5	9.09280	0.838	-89.9	68.7	40.7	33.0	26.5	41.73629	5-6	
7	-12.277	-19.745	938.76641	-52.2	11.2	-80.5	37.5	9.02007	0.850	-88.5	68.5	40.8	31.9	26.6	20.48465	6-7	

JULY 31, 1964 13 HR 19 MIN 37 SEC 155 MS TAB NO 32 ATLAS PHOTO NO 32 POD SEQUENCE NO 537

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										371.645	824.21332	-6.586	-29.168	2559.669	2.240	-69.912	116.163
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.524	-19.007	928.51833	-52.8	11.8	-80.9	37.2	8.92369	0.831	-89.2	69.3	39.7	33.8	28.3	0.	1-2	
3	-12.242	-19.749	915.90269	-52.2	11.2	-80.5	37.4	8.80038	0.850	-88.5	68.5	40.8	31.8	26.6	23.55736	2-3	
4	-12.153	-18.397	934.48152	-55.6	12.0	-80.7	35.9	8.97849	0.822	-88.4	69.8	38.6	34.7	30.2	40.12515	3-4	
5	-12.836	-18.231	942.57668	-53.3	12.5	-81.3	37.0	9.05663	0.811	-89.9	70.1	38.6	35.9	30.1	21.26004	4-5	
6	-12.987	-19.608	923.30336	-50.0	11.6	-80.9	38.5	8.87112	0.839	-89.9	68.7	40.8	33.0	26.5	40.70707	5-6	
7	-12.242	-19.749	915.90269	-52.2	11.2	-80.5	37.4	8.80038	0.850	-88.5	68.5	40.8	31.8	26.6	19.97679	6-7	

JULY 31, 1964 13 HR 19 MIN 45 SEC 554 MS TAB NO 33 ATLAS PHOTO NO 33 POD SEQUENCE NO 547

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										363.245	806.52231	-6.650	-29.037	2541.978	2.246	-69.820	116.145
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.489	-19.025	909.14516	-52.9	11.8	-80.9	37.1	8.73750	0.831	-89.2	69.3	39.7	33.8	28.3	0.	1-2	
3	-12.212	-19.751	896.80544	-52.3	11.2	-80.5	37.4	8.61689	0.850	-88.5	68.5	40.8	31.8	26.6	23.05919	2-3	
4	-12.125	-18.427	914.98425	-55.6	12.0	-80.7	35.9	8.79116	0.823	-88.4	69.8	38.6	34.6	30.1	39.28240	3-4	
5	-12.793	-18.265	922.86706	-53.3	12.4	-81.3	36.9	8.86744	0.811	-89.9	70.0	38.6	35.8	30.1	20.80747	4-5	
6	-12.843	-19.613	904.03252	-50.0	11.6	-81.0	38.4	8.68597	0.839	-89.9	68.7	40.8	33.0	26.5	39.84933	5-6	
7	-12.212	-19.751	896.80544	-52.3	11.2	-80.5	37.4	8.61689	0.850	-88.5	68.5	40.8	31.8	26.6	19.55302	6-7	

JULY 31, 1964 13 HR 19 MIN 52 SEC 274 MS TAB NO 34 ATLAS PHOTO NO 34 POD SEQUENCE NO 555

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										356.526	792.34277	-6.702	-28.930	2527.798	2.251	-69.745	116.130
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.460	-19.037	893.64264	-52.9	11.8	-80.9	37.1	8.58851	0.832	-89.2	69.2	39.7	33.7	28.3	0.	1-2	
3	-12.188	-19.750	881.52057	-52.4	11.1	-80.5	37.3	8.47003	0.850	-88.5	68.5	40.8	31.8	26.6	22.66215	2-3	
4	-12.102	-18.450	899.38465	-55.6	11.9	-80.7	35.9	8.64128	0.823	-88.4	69.8	38.6	34.6	30.1	38.61053	3-4	
5	-12.759	-18.291	907.13506	-53.4	12.4	-81.3	36.9	8.71609	0.812	-89.9	70.0	38.6	35.8	30.0	20.44574	4-5	
6	-12.809	-19.616	888.60995	-50.1	11.5	-81.0	38.3	8.53779	0.839	-89.9	68.7	40.8	32.9	26.5	39.16567	5-6	
7	-12.188	-19.750	881.52057	-52.4	11.1	-80.5	37.3	8.47003	0.850	-88.5	68.5	40.8	31.8	26.6	19.21416	6-7	

JULY 31, 1964 13 HR 20 MIN 2 SEC 353 MS TAB NO 35 ATLAS PHOTO NO 35 POD SEQUENCE NO 567

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										346.446	771.02951	-6.781	-28.768	2506.485	2.258	-69.632	116.107
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.417	-19.058	870.28205	-53.0	11.7	-80.9	37.0	8.36400	0.832	-89.2	69.2	39.7	33.7	28.3	0.	1-2	
3	-12.152	-19.753	858.49039	-52.4	11.1	-80.5	37.2	8.24874	0.850	-88.5	68.5	40.8	31.8	26.6	22.06260	2-3	
4	-12.069	-18.486	875.87505	-55.7	11.9	-80.7	35.8	8.41541	0.824	-88.4	69.7	38.6	34.6	30.1	37.59565	3-4	
5	-12.708	-18.332	883.39642	-53.4	12.4	-81.3	36.8	8.48800	0.812	-89.9	70.0	38.6	35.7	30.0	19.90111	4-5	
6	-12.757	-19.622	865.37280	-50.2	11.5	-81.0	38.2	8.31453	0.840	-89.9	68.7	40.8	32.9	26.5	38.13307	5-6	
7	-12.152	-19.753	858.49039	-52.4	11.1	-80.5	37.2	8.24874	0.850	-88.5	68.5	40.8	31.8	26.6	18.70398	6-7	

JULY 31, 1964 13 HR 20 MIN 9 SEC 73 MS TAB NO 36 ATLAS PHOTO NO 36 POD SEQUENCE NO 575

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										339.727	756.79056	-6.834	-28.658	2492.246	2.263	-69.555	116.091
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-12.388	-19.076	854.61900	-53.0	11.7	-80.9	37.0	8.21347	0.832	-89.2	69.2	39.7	33.7	28.3	0.	1-2	
3	-12.128	-19.758	843.05171	-52.5	11.1	-80.6	37.2	8.10040	0.851	-88.5	68.5	40.8	31.7	26.6	21.65919	2-3	
4	-12.046	-18.514	860.10923	-55.7	11.9	-80.7	35.8	8.26393	0.824	-88.4	69.7	38.6	34.5	30.1	36.91260	3-4	
5	-12.674	-18.363	867.47711	-53.4	12.3	-81.3	36.8	8.33505	0.813	-89.9	69.9	38.6	35.6	30.0	19.53579	4-5	
6	-12.722	-19.629	849.79549	-50.2	11.5	-81.0	38.2	8.16486	0.840	-89.9	68.7	40.8	32.9	26.5	37.43804	5-6	
7	-12.128	-19.758	843.05171	-52.5	11.1	-80.6	37.2	8.10040	0.851	-88.5	68.5	40.8	31.7	26.6	18.36207	6-7	

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JULY 31, 1964 13 HR 20 MIN 15 SEC 792 MS										TAB NO	37	ATLAS PHOTO NO	37	POD SEQUENCE NO	583			
TRAJECTORY DATA										SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										333.007		742.52756	-6.888	-28.547	2477.983	2.268	-69.478	116.075
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.359	-19.094	838.92213	-53.1	11.7	-80.9	36.9	8.06261	0.833	-89.2	69.2	39.7	33.6	28.2	0.	1- 2		
3	-12.104	-19.763	827.57913	-52.5	11.1	-80.6	37.2	7.95174	0.851	-88.5	68.5	40.8	31.7	26.6	21.25514	2- 3		
4	-12.024	-18.542	844.30934	-55.7	11.9	-80.7	35.8	8.11212	0.825	-88.4	69.7	38.6	34.5	30.0	36.22829	3- 4		
5	-12.640	-18.395	851.52437	-53.5	12.3	-81.3	36.8	8.18177	0.813	-89.9	69.9	38.6	35.6	29.9	19.17024	4- 5		
6	-12.687	-19.637	834.18477	-50.3	11.4	-81.0	38.1	8.01487	0.840	-89.9	68.7	40.8	32.8	26.4	36.74187	5- 6		
7	-12.104	-19.763	827.57913	-52.5	11.1	-80.6	37.2	7.95174	0.851	-88.5	68.5	40.8	31.7	26.6	18.01966	6- 7		
JULY 31, 1964 13 HR 20 MIN 22 SEC 512 MS										TAB NO	38	ATLAS PHOTO NO	38	POD SEQUENCE NO	591			
TRAJECTORY DATA										SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										326.288		728.24002	-6.943	-28.434	2463.695	2.273	-69.399	116.059
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.331	-19.111	823.19590	-53.1	11.6	-80.9	36.9	7.91147	0.833	-89.2	69.2	39.7	33.6	28.2	0.	1- 2		
3	-12.080	-19.767	812.07667	-52.6	11.1	-80.6	37.1	7.80278	0.851	-88.5	68.5	40.8	31.7	26.5	20.85084	2- 3		
4	-12.001	-18.570	828.47977	-55.7	11.8	-80.7	35.8	7.96003	0.825	-88.4	69.7	38.6	34.4	30.0	35.54306	3- 4		
5	-12.606	-18.426	835.54303	-53.5	12.3	-81.3	36.7	8.02821	0.814	-89.9	69.9	38.6	35.5	29.9	18.80450	4- 5		
6	-12.652	-19.644	818.54507	-50.4	11.4	-81.0	38.1	7.86461	0.841	-89.9	68.7	40.8	32.8	26.4	36.04489	5- 6		
7	-12.080	-19.767	812.07667	-52.6	11.1	-80.6	37.1	7.80278	0.851	-88.5	68.5	40.8	31.7	26.5	17.67699	6- 7		
JULY 31, 1964 13 HR 20 MIN 29 SEC 231 MS										TAB NO	39	ATLAS PHOTO NO	39	POD SEQUENCE NO	599			
TRAJECTORY DATA										SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										319.568		713.92828	-6.998	-28.320	2449.384	2.279	-69.320	116.042
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.302	-19.129	807.43410	-53.1	11.6	-80.9	36.9	7.75999	0.833	-89.2	69.1	39.7	33.5	28.2	0.	1- 2		
3	-12.056	-19.772	796.53857	-52.6	11.0	-80.6	37.1	7.65348	0.851	-88.5	68.5	40.8	31.7	26.5	20.44596	2- 3		
4	-11.974	-18.598	812.61464	-55.8	11.8	-80.7	35.7	7.80760	0.825	-88.4	69.6	38.6	34.4	30.0	34.85666	3- 4		
5	-12.572	-18.457	819.52644	-53.5	12.2	-81.3	36.7	7.87432	0.814	-89.9	69.8	38.6	35.5	29.9	18.43811	4- 5		
6	-12.616	-19.652	802.86996	-50.4	11.4	-81.0	38.0	7.71400	0.841	-89.9	68.7	40.8	32.8	26.4	35.34684	5- 6		
7	-12.056	-19.772	796.53857	-52.6	11.0	-80.6	37.1	7.65348	0.851	-88.5	68.5	40.8	31.7	26.5	17.33382	6- 7		
JULY 31, 1964 13 HR 20 MIN 35 SEC 951 MS										TAB NO	40	ATLAS PHOTO NO	40	POD SEQUENCE NO	607			
TRAJECTORY DATA										SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										312.848		699.59158	-7.054	-28.205	2435.047	2.284	-69.240	116.026
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.273	-19.143	791.68182	-53.2	11.6	-80.9	36.8	7.60860	0.834	-89.2	69.1	39.7	33.5	28.2	0.	1- 2		
3	-12.033	-19.774	781.00599	-52.7	11.0	-80.6	37.0	7.50424	0.851	-88.5	68.5	40.8	31.6	26.5	20.04333	2- 3		
4	-11.956	-18.623	796.76203	-55.8	11.8	-80.7	35.7	7.65529	0.826	-88.4	69.6	38.6	34.4	29.9	34.17382	3- 4		
5	-12.538	-18.485	803.52416	-53.6	12.2	-81.3	36.6	7.72056	0.815	-89.9	69.8	38.6	35.4	29.8	18.07273	4- 5		
6	-12.582	-19.656	787.26172	-50.5	11.4	-81.1	37.9	7.56346	0.841	-89.9	68.7	40.8	32.8	26.4	34.65263	5- 6		
7	-12.033	-19.774	781.00599	-52.7	11.0	-80.6	37.0	7.50424	0.851	-88.5	68.5	40.8	31.6	26.5	16.99125	6- 7		
JULY 31, 1964 13 HR 20 MIN 44 SEC 351 MS										TAB NO	41	ATLAS PHOTO NO	41	POD SEQUENCE NO	617			
TRAJECTORY DATA										SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										304.449		681.63547	-7.125	-28.059	2417.091	2.290	-69.139	116.004
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.237	-19.162	771.93665	-53.2	11.6	-80.9	36.8	7.41883	0.834	-89.2	69.1	39.7	33.5	28.2	0.	1- 2		
3	-12.002	-19.777	761.53561	-52.7	11.0	-80.6	37.0	7.31716	0.852	-88.5	68.5	40.8	31.6	26.5	19.53895	2- 3		
4	-11.924	-18.655	776.89118	-55.8	11.8	-80.6	35.7	7.46437	0.826	-88.4	69.6	38.6	34.3	29.9	33.31816	3- 4		
5	-12.495	-18.521	763.46645	-53.6	12.2	-81.3	36.6	7.52764	0.815	-89.9	69.8	38.6	35.4	29.8	17.61502	4- 5		
6	-12.538	-19.662	767.56197	-50.5	11.4	-81.1	37.9	7.37476	0.842	-89.9	68.7	40.8	32.7	26.4	33.78281	5- 6		
7	-12.002	-19.777	761.53561	-52.7	11.0	-80.6	37.0	7.31716	0.852	-88.5	68.5	40.8	31.6	26.5	16.56205	6- 7		
JULY 31, 1964 13 HR 20 MIN 49 SEC 390 MS										TAB NO	42	ATLAS PHOTO NO	42	POD SEQUENCE NO	623			
TRAJECTORY DATA										SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										299.409		670.84302	-7.168	-27.971	2406.298	2.294	-69.078	115.991
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
2	-12.215	-19.171	760.10160	-53.3	11.6	-80.9	36.7	7.30509	0.834	-89.2	69.1	39.7	33.5	28.2	0.	1- 2		
3	-11.984	-19.776	749.86195	-52.8	11.0	-80.6	36.9	7.20500	0.852	-88.5	68.5	40.8	31.6	26.6	19.23837	2- 3		
4	-11.911	-18.671	764.98359	-55.9	11.8	-80.8	35.7	7.34997	0.826	-88.4	69.6	38.6	34.3	29.9	32.80809	3- 4		
5	-12.469	-18.539	771.44789	-53.7	12.2	-81.3	36.6	7.41236	0.816	-89.9	69.7	38.6	35.4	29.8	17.34111	4- 5		
6	-12.511	-19.663	755.78757	-50.6	11.3	-81.1	37.8	7.26163	0.842	-89.9	68.6	40.8	32.7	26.4	33.26448	5- 6		
7	-11.984	-19.776	749.86195	-52.8	11.0	-80.6	36.9	7.20500	0.852	-88.5	68.5	40.8	31.6	26.6	16.30511	6- 7		

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JULY 31, 1964 13 HR 20 MIN 56 SEC 110 MS TAB NO 43 ATLAS PHOTO NO 43 POD SEQUENCE NO 631

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				292.690	656.43048	-7.225	-27.851	2391.886	2.300	-68.995	115.974					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.185	-19.183	744.28049	-53.3	11.5	-80.9	36.7	7.15304	0.834	-89.2	69.1	39.7	33.5	28.2	0.	1-2
3	-11.960	-19.775	734.25676	-52.8	11.0	-80.6	36.9	7.05505	0.852	-88.5	68.5	40.8	31.6	26.6	18.83648	2-3
4	-11.888	-18.693	749.06516	-55.9	11.7	-80.8	35.6	7.19702	0.826	-88.4	69.5	38.6	34.3	29.9	32.12601	3-4
5	-12.434	-18.564	755.38159	-53.7	12.1	-81.3	36.5	7.25799	0.816	-89.9	69.7	38.6	35.3	29.8	16.97512	4-5
6	-12.475	-19.665	740.04807	-50.7	11.3	-81.1	37.7	7.11041	0.842	-89.9	68.6	40.8	32.7	26.4	32.57138	5-6
7	-11.960	-19.775	734.25676	-52.8	11.0	-80.6	36.9	7.05505	0.852	-88.5	68.5	40.8	31.6	26.6	15.96166	6-7

JULY 31, 1964 13 HR 21 MIN 1 SEC 150 MS TAB NO 44 ATLAS PHOTO NO 44 POD SEQUENCE NO 637

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				287.650	645.60431	-7.269	-27.761	2381.060	2.304	-68.932	115.961					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.164	-19.193	732.36819	-53.4	11.5	-80.9	36.6	7.03855	0.834	-89.2	69.1	39.7	33.4	28.2	0.	1-2
3	-11.941	-19.776	722.50830	-52.9	11.0	-80.6	36.8	6.94217	0.852	-88.5	68.5	40.8	31.6	26.6	18.53326	2-3
4	-11.871	-18.712	737.07790	-55.9	11.7	-80.8	35.6	7.08185	0.827	-88.4	69.5	38.6	34.3	29.9	31.61107	3-4
5	-12.408	-19.585	743.28341	-53.8	12.1	-81.3	36.5	7.14175	0.816	-89.9	69.7	38.6	35.3	29.8	16.69974	4-5
6	-12.449	-19.668	728.19888	-50.7	11.3	-81.1	37.7	6.99656	0.842	-89.9	68.6	40.8	32.7	26.4	32.04815	5-6
7	-11.941	-19.776	722.50830	-52.9	11.0	-80.6	36.8	6.94217	0.852	-88.5	68.5	40.8	31.6	26.6	15.70333	6-7

JULY 31, 1964 13 HR 21 MIN 9 SEC 549 MS TAB NO 45 ATLAS PHOTO NO 45 POD SEQUENCE NO 647

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				279.250	627.52835	-7.343	-27.608	2362.984	2.310	-68.827	115.938					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.127	-19.214	712.42883	-53.4	11.5	-80.9	36.6	6.84690	0.835	-89.1	69.0	39.7	33.4	28.2	0.	1-2
3	-11.911	-19.781	702.84351	-52.9	11.0	-80.6	36.8	6.75322	0.852	-88.5	68.5	40.8	31.6	26.6	18.02432	2-3
4	-11.843	-18.746	717.00815	-55.9	11.7	-80.8	35.6	6.88902	0.827	-88.4	69.5	38.6	34.2	29.9	30.74665	3-4
5	-12.365	-18.623	723.02880	-53.8	12.1	-81.3	36.4	6.94713	0.817	-89.9	69.6	38.5	35.3	29.7	16.23897	4-5
6	-12.405	-19.676	708.36628	-50.8	11.3	-81.1	37.6	6.80601	0.842	-89.9	68.6	40.7	32.7	26.4	31.16984	5-6
7	-11.911	-19.781	702.84351	-52.9	11.0	-80.6	36.8	6.75322	0.852	-88.5	68.5	40.8	31.6	26.6	15.27108	6-7

JULY 31, 1964 13 HR 21 MIN 16 SEC 269 MS TAB NO 46 ATLAS PHOTO NO 46 POD SEQUENCE NO 655

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				272.531	613.03787	-7.403	-27.484	2348.493	2.316	-68.742	115.919					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.098	-19.231	696.42801	-53.5	11.5	-81.0	36.5	6.69314	0.835	-89.1	69.0	39.6	33.4	28.1	0.	1-2
3	-11.887	-19.785	687.06661	-53.0	10.9	-80.6	36.7	6.60163	0.852	-88.5	68.5	40.8	31.6	26.6	17.61640	2-3
4	-11.820	-18.774	700.90654	-56.0	11.7	-80.8	35.5	6.73432	0.827	-88.4	69.4	38.6	34.2	29.8	30.05352	3-4
5	-12.330	-18.653	706.77956	-53.8	12.1	-81.3	36.4	6.79100	0.817	-89.9	69.6	38.5	35.2	29.7	15.86956	4-5
6	-12.369	-19.682	692.45466	-50.9	11.3	-81.1	37.5	6.65313	0.842	-89.9	68.6	40.7	32.6	26.4	30.46565	5-6
7	-11.887	-19.785	687.06601	-53.0	10.9	-80.6	36.7	6.60163	0.852	-88.5	68.5	40.8	31.6	26.6	14.92447	6-7

JULY 31, 1964 13 HR 21 MIN 22 SEC 988 MS TAB NO 47 ATLAS PHOTO NO 47 POD SEQUENCE NO 663

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				265.811	598.52148	-7.463	-27.358	2333.977	2.322	-68.655	115.901					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.068	-19.248	680.39355	-53.5	11.5	-81.0	36.5	6.53904	0.835	-89.1	69.0	39.6	33.3	28.1	0.	1-2
3	-11.862	-19.789	671.25256	-53.0	10.9	-80.7	36.7	6.44468	0.852	-88.5	68.5	40.8	31.6	26.6	17.20793	2-3
4	-11.797	-18.801	684.76960	-56.0	11.7	-80.8	35.5	6.57927	0.828	-88.4	69.4	38.6	34.2	29.8	29.35946	3-4
5	-12.295	-18.684	690.49532	-53.9	12.0	-81.3	36.4	6.63454	0.818	-89.9	69.6	38.5	35.2	29.7	15.49961	4-5
6	-12.333	-19.689	676.50731	-50.9	11.2	-81.1	37.5	6.49991	0.843	-89.9	68.6	40.7	32.6	26.5	29.76061	5-6
7	-11.862	-19.789	671.25256	-53.0	10.9	-80.7	36.7	6.44468	0.852	-88.5	68.5	40.8	31.6	26.6	14.57728	6-7

JULY 31, 1964 13 HR 21 MIN 28 SEC 128 MS TAB NO 48 ATLAS PHOTO NO 48 POD SEQUENCE NO 669

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ					
				260.771	587.61664	-7.509	-27.263	2323.072	2.326	-68.590	115.886					
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.046	-19.261	668.33601	-53.5	11.5	-81.0	36.5	6.42316	0.836	-89.1	69.0	39.6	33.3	28.1	0.	1-2
3	-11.844	-19.792	659.36117	-53.1	10.9	-80.7	36.6	6.33543	0.852	-88.5	68.5	40.8	31.6	26.6	16.90079	2-3
4	-11.779	-18.822	672.43490	-56.0	11.7	-80.8	35.5	6.46268	0.828	-88.4	69.4	38.6	34.1	29.8	28.83748	3-4
5	-12.264	-18.707	678.25015	-53.9	12.0	-81.3	36.3	6.51688	0.816	-89.9	69.6	38.5	35.2	29.7	15.22143	4-5
6	-12.306	-19.694	664.51549	-51.0	11.2	-81.2	37.4	6.38469	0.843	-89.9	68.6	40.7	32.6	26.5	29.23043	5-6
7	-11.844	-19.792	659.36117	-53.1	10.9	-80.7	36.6	6.33543	0.852	-88.5	68.5	40.8	31.6	26.6	14.31629	6-7

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JULY 31, 1964 13 HR 21 MIN 36 SEC 427 MS TAB NO 49 ATLAS PHOTO NO 49 POD SEQUENCE NO 679

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
252.372 569.40836 -7.587 -27.102 2304.864 2.333 -68.479 115.862

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-12.009	-19.286	648.15021	-53.6	11.4	-81.0	36.4	6.22916	0.836	-89.1	69.0	39.6	33.3	28.1	0.	1-2
3	-11.812	-19.801	639.45544	-53.1	10.9	-80.7	36.6	6.14416	0.853	-88.5	68.4	40.8	31.5	26.6	16.38564	2-3
4	-11.750	-18.860	652.31802	-56.0	11.6	-80.8	35.5	6.26748	0.828	-88.4	69.4	38.6	34.1	29.8	27.96190	3-4
5	-12.224	-18.749	657.74849	-53.9	12.0	-81.3	36.3	6.31990	0.818	-89.8	69.5	38.5	35.1	29.6	14.75603	4-5
6	-12.261	-19.706	644.44172	-51.0	11.2	-81.2	37.4	6.19182	0.843	-89.9	68.6	40.7	32.4	26.4	28.34109	5-6
7	-11.812	-19.801	639.45544	-53.1	10.9	-80.7	36.6	6.14416	0.853	-88.5	68.4	40.8	31.5	26.6	13.87949	6-7

JULY 31, 1964 13 HR 21 MIN 43 SEC 147 MS TAB NO 50 ATLAS PHOTO NO 50 POD SEQUENCE NO 687

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
245.652 554.81079 -7.649 -26.971 2290.266 2.339 -68.390 115.842

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.978	-19.306	631.94466	-53.6	11.4	-81.0	36.4	6.07342	0.836	-89.1	68.9	39.6	33.3	28.1	0.	1-2
3	-11.787	-19.808	623.47467	-53.1	10.9	-80.7	36.6	5.99061	0.853	-88.5	68.4	40.7	31.5	26.6	15.97213	2-3
4	-11.726	-18.891	636.00704	-56.1	11.6	-80.7	35.5	6.11076	0.829	-88.4	69.3	38.5	34.1	29.7	27.25890	3-4
5	-12.189	-18.783	641.28970	-54.0	12.0	-81.3	36.2	6.16175	0.819	-89.8	69.5	38.5	35.0	29.6	14.38254	4-5
6	-12.224	-19.716	628.32650	-51.1	11.2	-81.2	37.3	6.03699	0.843	-89.9	68.6	40.7	32.5	26.4	27.62711	5-6
7	-11.787	-19.808	623.47469	-53.1	10.9	-80.7	36.6	5.99061	0.853	-88.5	68.4	40.7	31.5	26.6	13.52902	6-7

JULY 31, 1964 13 HR 21 MIN 49 SEC 867 MS TAB NO 51 ATLAS PHOTO NO 51 POD SEQUENCE NO 695

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
236.933 540.18652 -7.713 -26.839 2275.642 2.345 -68.299 115.822

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.949	-19.328	615.69439	-53.6	11.4	-81.0	36.4	5.91724	0.837	-89.1	68.9	39.6	33.2	28.1	0.	1-2
3	-11.762	-19.817	607.44978	-53.2	10.9	-80.7	36.5	5.83664	0.853	-88.5	68.4	40.8	31.5	26.6	15.55742	2-3
4	-11.703	-18.924	619.64925	-56.1	11.6	-80.7	35.5	5.95360	0.829	-88.4	69.3	38.6	34.0	29.7	26.55311	3-4
5	-12.154	-18.819	624.78594	-54.0	11.9	-81.3	36.2	6.00318	0.819	-89.8	69.4	38.5	35.0	29.6	14.00884	4-5
6	-12.188	-19.727	612.16879	-51.1	11.2	-81.2	37.3	5.88174	0.844	-89.9	68.6	40.7	32.5	26.4	26.91049	5-6
7	-11.752	-19.817	607.44978	-53.2	10.9	-80.7	36.5	5.83664	0.853	-88.5	68.4	40.8	31.5	26.6	13.17828	6-7

JULY 31, 1964 13 HR 21 MIN 54 SEC 906 MS TAB NO 52 ATLAS PHOTO NO 52 POD SEQUENCE NO 701

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
233.893 529.19958 -7.761 -26.738 2264.655 2.349 -68.231 115.807

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.927	-19.345	603.47379	-53.7	11.4	-81.0	36.3	5.79979	0.837	-89.1	68.9	39.6	33.2	28.1	0.	1-2
3	-11.744	-19.824	595.39852	-53.2	10.9	-80.7	36.5	5.72085	0.853	-88.5	68.4	40.8	31.5	26.6	15.24566	2-3
4	-11.686	-18.948	607.34768	-56.1	11.6	-80.7	35.5	5.83540	0.829	-88.4	69.3	38.6	34.0	29.7	26.02235	3-4
5	-12.128	-18.846	612.37505	-54.0	11.9	-81.3	36.2	5.88393	0.820	-89.8	69.4	38.5	35.0	29.5	13.72785	4-5
6	-12.162	-19.736	600.01803	-51.2	11.2	-81.2	37.2	5.76500	0.844	-89.8	68.6	40.7	32.5	26.4	26.37163	5-6
7	-11.744	-19.824	595.39852	-53.2	10.9	-80.7	36.5	5.72085	0.853	-88.5	68.4	40.8	31.5	26.6	12.91467	6-7

JULY 31, 1964 13 HR 22 MIN 4 SEC 986 MS TAB NO 53 ATLAS PHOTO NO 53 POD SEQUENCE NO 713

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
223.814 507.17917 -7.859 -26.534 2242.634 2.358 -68.092 115.775

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.882	-19.381	578.92010	-53.7	11.4	-81.0	36.3	5.56381	0.837	-89.1	68.9	39.6	33.1	28.0	0.	1-2
3	-11.707	-19.860	571.18652	-53.2	10.9	-80.7	36.5	5.48821	0.853	-88.5	68.4	40.8	31.4	26.5	14.61858	2-3
4	-11.651	-19.003	582.62996	-56.1	11.6	-80.7	35.5	5.59792	0.830	-88.4	69.2	38.6	33.9	29.6	24.95473	3-4
5	-12.075	-18.903	587.43786	-54.0	11.9	-81.3	36.2	5.64432	0.820	-89.8	69.4	38.5	34.9	29.5	13.16358	4-5
6	-12.107	-19.756	575.60622	-51.2	11.1	-81.2	37.2	5.53045	0.844	-89.8	68.5	40.7	32.4	26.4	25.28769	5-6
7	-11.707	-19.860	571.18652	-53.2	10.9	-80.7	36.5	5.48821	0.853	-88.5	68.4	40.8	31.4	26.5	12.38510	6-7

JULY 31, 1964 13 HR 22 MIN 11 SEC 705 MS TAB NO 54 ATLAS PHOTO NO 54 POD SEQUENCE NO 721

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
217.094 492.46402 -7.925 -26.396 2227.919 2.364 -67.998 115.754

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.852	-19.407	562.47780	-53.7	11.3	-81.0	36.3	5.40579	0.838	-89.1	68.8	39.7	33.1	28.0	0.	1-2
3	-11.681	-19.853	554.97315	-53.3	10.8	-80.7	36.4	5.33242	0.854	-88.5	68.4	40.8	31.4	26.5	14.19845	2-3
4	-11.627	-19.038	566.07722	-56.1	11.6	-80.7	35.5	5.43888	0.830	-88.3	69.2	38.6	33.9	29.6	24.23945	3-4
5	-12.034	-18.942	570.73896	-54.1	11.9	-81.3	36.2	5.48387	0.821	-89.8	69.3	38.5	34.8	29.4	12.78595	4-5
6	-12.070	-19.771	559.25935	-51.2	11.1	-81.2	37.1	5.37339	0.845	-89.8	68.5	40.7	32.4	26.4	24.56158	5-6
7	-11.681	-19.853	554.97315	-53.3	10.8	-80.7	36.4	5.33242	0.854	-88.5	68.4	40.8	31.4	26.5	12.03076	6-7

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JULY 31, 1964 13 HR 22 MIN 16 SEC 745 MS TAB NO 55 ATLAS PHOTO NO 55 POD SEQUENCE NO 727

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				212.054		481.40863	-7.975	-26.291	2216.864	2.369	-67.926	115.737				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT		
2	-11.829	-19.426	550.11562	-53.7	11.3	-81.0	36.3	5.28698	0.838	-89.1	68.8	39.7	33.1	28.0	0.	1-2
3	-11.662	-19.862	542.78298	-53.3	10.8	-80.7	36.4	5.21529	0.854	-88.5	68.4	40.8	31.4	26.5	13.88280	2-3
4	-11.609	-19.065	553.63271	-56.1	11.5	-80.7	35.5	5.31931	0.831	-88.3	69.2	38.6	33.8	29.5	23.70205	3-4
5	-12.011	-18.972	558.18417	-54.1	11.8	-81.3	36.2	5.36324	0.821	-89.8	69.3	38.5	34.8	29.4	12.50195	4-5
6	-12.043	-19.782	546.96909	-51.3	11.1	-81.2	37.1	5.25530	0.845	-89.8	68.5	40.8	32.4	26.4	24.01607	5-6
7	-11.662	-19.862	542.78298	-53.3	10.8	-80.7	36.4	5.21529	0.854	-88.5	68.4	40.8	31.4	26.5	11.76432	6-7

JULY 31, 1964 13 HR 22 MIN 23 SEC 465 MS TAB NO 56 ATLAS PHOTO NO 56 POD SEQUENCE NO 735

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				205.335		466.64313	-8.042	-26.150	2202.098	2.375	-67.830	115.715				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT		
2	-11.798	-19.452	533.59155	-53.7	11.3	-81.0	36.3	5.12818	0.838	-89.1	68.8	39.7	33.0	27.9	0.	1-2
3	-11.636	-19.875	526.48804	-53.3	10.8	-80.7	36.4	5.05872	0.854	-88.5	68.4	40.8	31.4	26.5	13.46119	2-3
4	-11.584	-19.102	536.99865	-56.1	11.5	-80.7	35.5	5.15949	0.831	-88.3	69.1	38.6	33.8	29.5	22.98413	3-4
5	-11.975	-19.012	541.40379	-54.1	11.8	-81.3	36.1	5.20201	0.822	-89.8	69.2	38.6	34.7	29.4	12.12278	4-5
6	-12.005	-19.798	530.54070	-51.3	11.1	-81.2	37.1	5.09746	0.845	-89.8	68.5	40.8	32.3	26.3	23.28741	5-6
7	-11.636	-19.875	526.48804	-53.3	10.8	-80.7	36.4	5.05872	0.854	-88.5	68.4	40.8	31.4	26.5	11.40819	6-7

JULY 31, 1964 13 HR 22 MIN 26 SEC 824 MS TAB NO 57 ATLAS PHOTO NO 57 POD SEQUENCE NO 739

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				201.975		459.24948	-8.077	-26.078	2194.705	2.378	-67.782	115.704				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT		
2	-11.782	-19.465	525.31025	-53.7	11.3	-81.0	36.3	5.04859	0.839	-89.1	68.8	39.7	33.0	27.9	0.	1-2
3	-11.623	-19.882	518.32140	-53.3	10.8	-80.7	36.4	4.98026	0.854	-88.5	68.4	40.8	31.4	26.5	13.25000	2-3
4	-11.572	-19.121	528.66231	-56.1	11.5	-80.7	35.5	5.07940	0.832	-88.3	69.1	38.6	33.8	29.5	22.62446	3-4
5	-11.956	-19.033	532.99432	-54.1	11.8	-81.3	36.1	5.12121	0.822	-89.8	69.2	38.6	34.7	29.3	11.93289	4-5
6	-11.986	-19.806	522.30734	-51.3	11.1	-81.2	37.1	5.01835	0.845	-89.8	68.5	40.8	32.3	26.3	22.92235	5-6
7	-11.623	-19.882	518.32140	-53.3	10.8	-80.7	36.4	4.98026	0.854	-88.5	68.4	40.8	31.4	26.5	11.22983	6-7

JULY 31, 1964 13 HR 22 MIN 31 SEC 864 MS TAB NO 58 ATLAS PHOTO NO 58 POD SEQUENCE NO 745

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				196.935		448.14560	-8.128	-25.970	2183.601	2.383	-67.709	115.687				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT		
2	-11.758	-19.486	512.85880	-53.8	11.3	-81.0	36.2	4.92892	0.839	-89.1	68.8	39.7	33.0	27.9	0.	1-2
3	-11.603	-19.892	506.04251	-53.3	10.8	-80.7	36.4	4.86227	0.854	-88.5	68.3	40.8	31.3	26.5	12.93236	2-3
4	-11.553	-19.150	516.12788	-56.1	11.5	-80.7	35.5	4.95897	0.832	-88.3	69.1	38.6	33.7	29.4	22.08345	3-4
5	-11.928	-19.064	520.35007	-54.1	11.8	-81.3	36.1	4.99972	0.823	-89.8	69.2	38.6	34.7	29.3	11.64728	4-5
6	-11.958	-19.818	509.92828	-51.4	11.1	-81.2	37.0	4.89941	0.846	-89.8	68.5	40.8	32.3	26.3	22.37335	5-6
7	-11.603	-19.892	506.04251	-53.3	10.8	-80.7	36.4	4.86227	0.854	-88.5	68.3	40.8	31.3	26.5	10.96182	6-7

JULY 31, 1964 13 HR 22 MIN 36 SEC 904 MS TAB NO 59 ATLAS PHOTO NO 59 POD SEQUENCE NO 751

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				191.896		437.02475	-8.180	-25.860	2172.480	2.388	-67.635	115.669				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT		
2	-11.734	-19.507	500.37420	-53.8	11.3	-81.0	36.2	4.80893	0.839	-89.1	68.7	39.7	32.9	27.9	0.	1-2
3	-11.583	-19.903	493.73092	-53.3	10.8	-80.7	36.4	4.74398	0.855	-88.5	68.3	40.8	31.3	26.5	12.61388	2-3
4	-11.534	-19.179	503.56002	-56.1	11.5	-80.7	35.5	4.83821	0.832	-88.3	69.0	38.6	33.7	29.4	21.54102	3-4
5	-11.900	-19.095	507.67239	-54.1	11.8	-81.3	36.1	4.87791	0.823	-89.8	69.2	38.6	34.6	29.3	11.36114	4-5
6	-11.929	-19.831	497.51643	-51.4	11.0	-81.2	37.0	4.78016	0.846	-89.8	68.4	40.8	32.3	26.3	21.82288	5-6
7	-11.583	-19.903	493.73092	-53.3	10.8	-80.7	36.4	4.74398	0.855	-88.5	68.3	40.8	31.3	26.5	10.69300	6-7

JULY 31, 1964 13 HR 22 MIN 41 SEC 944 MS TAB NO 60 ATLAS PHOTO NO 60 POD SEQUENCE NO 757

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				186.856		425.88745	-8.233	-25.750	2161.343	2.393	-67.560	115.652				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT		
2	-11.710	-19.529	487.86051	-53.8	11.3	-81.0	36.2	4.68867	0.840	-89.1	68.7	39.7	32.9	27.8	0.	1-2
3	-11.563	-19.915	481.39034	-53.4	10.8	-80.7	36.4	4.62541	0.855	-88.5	68.3	40.8	31.3	26.4	12.29478	2-3
4	-11.515	-19.209	490.96307	-56.1	11.5	-80.7	35.5	4.71718	0.833	-88.3	69.0	38.6	33.6	29.4	20.99755	3-4
5	-11.872	-19.127	494.96565	-54.1	11.7	-81.3	36.1	4.75582	0.824	-89.8	69.1	38.6	34.6	29.2	11.07433	4-5
6	-11.900	-19.844	485.07561	-51.4	11.0	-81.2	37.0	4.66063	0.846	-89.8	68.4	40.8	32.2	26.3	21.27141	5-6
7	-11.563	-19.915	481.39034	-53.4	10.8	-80.7	36.4	4.62541	0.855	-88.5	68.3	40.8	31.3	26.4	10.42366	6-7

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JULY 31, 1964 13 HR 22 MIN 46 SEC 983 MS

TAB NO 61 ATLAS PHOTO NO 61 POD SEQUENCE NO 763

TRAJECTORY DATA SEC TO IMPACT 181.816 ALT 414.73358 LAT -8.286 LCN -25.638 R 2150.189 V 2.398 PTH -67.484 AZ 115.634

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.686	-19.549	475.34064	-53.8	11.2	-81.0	36.2	4.56835	0.84C	-89.1	68.7	39.7	32.9	27.8	0.	1-2
3	-11.542	-19.925	469.04188	-53.4	10.8	-80.7	36.3	4.50676	0.855	-88.5	68.3	40.8	31.3	26.4	11.97648	2-3
4	-11.496	-19.237	478.36133	-56.1	11.5	-80.7	35.5	4.59611	0.833	-88.3	69.0	38.6	33.6	29.4	20.45527	3-4
5	-11.843	-19.158	482.75471	-54.1	11.7	-81.3	36.1	4.63368	0.824	-89.8	69.1	38.6	34.5	29.2	10.78775	4-5
6	-11.871	-19.856	472.62735	-51.4	11.0	-81.2	36.9	4.54103	0.846	-89.8	68.4	40.8	32.2	26.3	20.72126	5-6
7	-11.542	-19.925	469.04188	-53.4	10.8	-80.7	36.3	4.50676	0.855	-88.5	68.3	40.8	31.3	26.4	10.15433	6-7

JULY 31, 1964 13 HR 22 MIN 53 SEC 703 MS

TAB NO 62 ATLAS PHOTO NO 62 POD SEQUENCE NO 771

TRAJECTORY DATA SEC TO IMPACT 175.097 ALT 399.83530 LAT -8.357 LCN -25.487 R 2135.291 V 2.404 PTH -67.383 AZ 115.610

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.653	-19.575	458.61607	-53.8	11.2	-81.0	36.2	4.40761	0.84C	-89.1	68.7	39.7	32.8	27.8	0.	1-2
3	-11.501	-19.938	442.54490	-53.4	10.8	-80.7	36.3	4.34825	0.855	-88.5	68.3	40.8	31.2	26.4	11.55204	2-3
4	-11.470	-19.274	461.52848	-56.1	11.4	-80.7	35.4	4.43438	0.833	-88.3	68.9	38.6	33.6	29.3	19.73200	3-4
5	-11.805	-19.198	465.27663	-54.2	11.7	-81.3	36.1	4.47055	0.824	-89.8	69.0	38.6	34.5	29.2	10.40502	4-5
6	-11.831	-19.871	455.99753	-51.5	11.0	-81.2	36.9	4.38125	0.847	-89.8	68.4	40.8	32.2	26.3	19.98758	5-6
7	-11.515	-19.938	452.54490	-53.4	10.8	-80.7	36.3	4.34825	0.855	-88.5	68.3	40.8	31.2	26.4	9.79478	6-7

JULY 31, 1964 13 HR 22 MIN 57 SEC 63 MS

TAB NO 63 ATLAS PHOTO NO 63 POD SEQUENCE NO 775

TRAJECTORY DATA SEC TO IMPACT 171.737 ALT 392.37494 LAT -8.394 LCN -25.411 R 2127.830 V 2.408 PTH -67.331 AZ 115.597

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.636	-19.588	450.23248	-53.8	11.2	-81.0	36.2	4.32704	0.84C	-89.1	68.6	39.7	32.8	27.8	0.	1-2
3	-11.501	-19.944	444.27526	-53.4	10.8	-80.7	36.3	4.26879	0.855	-88.4	68.3	40.8	31.2	26.4	11.33932	2-3
4	-11.456	-19.293	453.09061	-56.1	11.4	-80.7	35.4	4.35331	0.834	-88.3	68.9	38.6	33.6	29.3	19.36949	3-4
5	-11.786	-19.218	456.76617	-54.2	11.7	-81.3	36.0	4.38878	0.825	-89.8	69.0	38.6	34.5	29.1	10.21335	4-5
6	-11.812	-19.879	447.68148	-51.5	11.0	-81.2	36.9	4.30115	0.847	-89.8	68.4	40.8	32.2	26.3	19.61987	5-6
7	-11.501	-19.944	444.27526	-53.4	10.8	-80.7	36.3	4.26879	0.855	-88.4	68.3	40.8	31.2	26.4	9.61454	6-7

JULY 31, 1964 13 HR 23 MIN 0 SEC 422 MS

TAB NO 64 ATLAS PHOTO NO 64 POD SEQUENCE NO 779

TRAJECTORY DATA SEC TO IMPACT 168.377 ALT 384.90707 LAT -8.430 LCN -25.334 R 2120.362 V 2.411 PTH -67.280 AZ 115.585

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.620	-19.602	441.83559	-53.9	11.2	-81.0	36.1	4.24634	0.84C	-89.1	68.6	39.7	32.8	27.8	0.	1-2
3	-11.486	-19.951	435.99244	-53.4	10.8	-80.7	36.3	4.18920	0.855	-88.4	68.3	40.8	31.2	26.4	11.12629	2-3
4	-11.443	-19.312	444.63347	-56.1	11.4	-80.7	35.4	4.27211	0.834	-88.3	68.9	38.6	33.5	29.3	19.00652	3-4
5	-11.766	-19.239	448.24244	-54.2	11.7	-81.3	36.0	4.30688	0.825	-89.8	69.0	38.6	34.4	29.1	10.02128	4-5
6	-11.792	-19.887	439.31223	-51.5	11.0	-81.3	36.8	4.22093	0.847	-89.8	68.4	40.8	32.1	26.3	19.25170	5-6
7	-11.466	-19.951	435.99244	-53.4	10.8	-80.7	36.3	4.18920	0.855	-88.4	68.3	40.8	31.2	26.4	9.43409	6-7

JULY 31, 1964 13 HR 23 MIN 7 SEC 142 MS

TAB NO 65 ATLAS PHOTO NO 65 POD SEQUENCE NO 787

TRAJECTORY DATA SEC TO IMPACT 161.657 ALT 369.94806 LAT -8.503 LCN -25.179 R 2105.403 V 2.418 PTH -67.175 AZ 115.560

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.586	-19.629	424.99969	-53.9	11.2	-81.0	36.1	4.08454	0.841	-89.1	68.6	39.7	32.8	27.8	0.	1-2
3	-11.458	-19.965	419.38483	-53.5	10.7	-80.7	36.2	4.02963	0.856	-88.4	68.3	40.8	31.2	26.4	10.69945	2-3
4	-11.410	-19.351	427.69493	-56.1	11.4	-80.7	35.4	4.10940	0.834	-88.3	68.9	38.6	33.5	29.3	18.27895	3-4
5	-11.727	-19.280	431.15282	-54.2	11.7	-81.3	36.0	4.14268	0.825	-89.8	69.0	38.6	34.4	29.1	9.63655	4-5
6	-11.751	-19.904	422.57180	-51.6	11.0	-81.3	36.8	4.06009	0.847	-89.8	68.4	40.8	32.1	26.2	18.51381	5-6
7	-11.458	-19.965	419.38483	-53.5	10.7	-80.7	36.2	4.02963	0.856	-88.4	68.3	40.8	31.2	26.4	9.07249	6-7

JULY 31, 1964 13 HR 23 MIN 12 SEC 182 MS

TAB NO 66 ATLAS PHOTO NO 66 POD SEQUENCE NO 793

TRAJECTORY DATA SEC TO IMPACT 156.618 ALT 358.70837 LAT -8.559 LCN -25.061 R 2094.164 V 2.423 PTH -67.096 AZ 115.540

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.561	-19.650	412.33376	-53.9	11.2	-81.0	36.1	3.96281	0.841	-89.1	68.6	39.7	32.7	27.7	0.	1-2
3	-11.436	-19.976	406.89048	-53.5	10.7	-80.7	36.2	3.90958	0.856	-88.4	68.3	40.8	31.2	26.4	10.37839	2-3
4	-11.390	-19.380	414.94729	-56.1	11.4	-80.7	35.4	3.98682	0.834	-88.3	68.8	38.6	33.5	29.2	17.73168	3-4
5	-11.697	-19.312	418.29638	-54.2	11.6	-81.3	36.0	4.01915	0.826	-89.8	68.9	38.6	34.3	29.1	9.34715	4-5
6	-11.721	-19.917	409.97774	-51.6	10.9	-81.3	36.7	3.93509	0.847	-89.8	68.3	40.8	32.1	26.2	17.95882	5-6
7	-11.436	-19.976	406.89048	-53.5	10.7	-80.7	36.2	3.90958	0.856	-88.4	68.3	40.8	31.2	26.4	8.80043	6-7

RA-VII CAMERA P1

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JULY 31, 1964 13 HR 23 MIN 15 SEC 542 MS

TAB NO 67

ATLAS PHOTO NO 67

POD SEQUENCE NO 797

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		153.258	351.20572	-8.597	-24.982	2086.661	2.426	-67.043	115.527							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.544	-19.665	403.87333	-53.9	11.2	-81.0	36.1	3.88150	0.841	-89.1	68.6	39.7	32.7	27.7	0.	1-2
3	-11.422	-19.984	398.54446	-53.5	10.7	-80.7	36.2	3.82939	0.856	-88.4	68.2	40.8	31.2	26.4	10.16406	2-3
4	-11.382	-19.400	406.43206	-56.1	11.4	-80.7	35.4	3.90561	0.835	-88.3	68.8	38.6	33.4	29.2	17.36611	3-4
5	-11.677	-19.333	409.70894	-54.2	11.6	-81.3	36.0	3.93661	0.826	-89.8	68.9	38.6	34.3	29.0	9.15412	4-5
6	-11.701	-19.926	401.56562	-51.6	10.9	-81.3	36.7	3.85826	0.848	-89.8	68.3	40.8	32.0	26.2	17.58813	5-6
7	-11.422	-19.984	398.54446	-53.5	10.7	-80.7	36.2	3.82939	0.856	-88.4	68.2	40.8	31.2	26.4	8.61899	6-7

JULY 31, 1964 13 HR 23 MIN 20 SEC 581 MS

TAB NO 68

ATLAS PHOTO NO 68

POD SEQUENCE NO 803

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		148.218	339.93686	-8.653	-24.861	2075.392	2.432	-66.963	115.508							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.518	-19.686	391.15659	-53.9	11.2	-81.0	36.1	3.75928	0.841	-89.1	68.5	39.7	32.7	27.7	0.	1-2
3	-11.401	-19.995	385.99952	-53.5	10.7	-80.7	36.2	3.70885	0.856	-88.4	68.2	40.8	31.2	26.4	9.84194	2-3
4	-11.362	-19.430	393.63281	-56.1	11.4	-80.7	35.4	3.78203	0.835	-88.3	68.8	38.6	33.4	29.2	16.81664	3-4
5	-11.648	-19.366	396.80175	-54.3	11.6	-81.3	36.0	3.81262	0.826	-89.8	68.9	38.6	34.3	29.0	8.86413	4-5
6	-11.671	-19.939	388.92177	-51.7	10.9	-81.3	36.7	3.73678	0.848	-89.8	68.3	40.8	32.0	26.2	17.03101	5-6
7	-11.401	-19.995	385.99952	-53.5	10.7	-80.7	36.2	3.70885	0.856	-88.4	68.2	40.8	31.2	26.4	8.34632	6-7

JULY 31, 1964 13 HR 23 MIN 22 SEC 261 MS

TAB NO 69

ATLAS PHOTO NO 69

POD SEQUENCE NO 805

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		146.538	336.17682	-8.672	-24.821	2071.632	2.433	-66.936	115.501							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.510	-19.694	386.91026	-53.9	11.2	-81.0	36.1	3.71847	0.842	-89.1	68.5	39.7	32.7	27.7	0.	1-2
3	-11.393	-19.999	381.81050	-53.5	10.7	-80.7	36.2	3.66860	0.856	-88.4	68.2	40.8	31.2	26.4	9.73440	2-3
4	-11.355	-19.441	389.35893	-56.1	11.4	-80.7	35.4	3.74097	0.835	-88.3	68.8	38.6	33.4	29.2	16.63191	3-4
5	-11.638	-19.377	392.49190	-54.3	11.6	-81.3	36.0	3.77121	0.827	-89.8	68.9	38.6	34.3	29.0	8.76734	4-5
6	-11.660	-19.944	384.69977	-51.7	10.9	-81.3	36.7	3.69622	0.848	-89.8	68.3	40.8	32.0	26.2	16.84502	5-6
7	-11.393	-19.999	381.81050	-53.5	10.7	-80.7	36.2	3.66860	0.856	-88.4	68.2	40.8	31.2	26.4	8.25526	6-7

JULY 31, 1964 13 HR 23 MIN 23 SEC 941 MS

TAB NO 70

ATLAS PHOTO NO 70

POD SEQUENCE NO 807

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		144.858	332.41461	-8.692	-24.781	2067.870	2.435	-66.909	115.494							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.501	-19.701	382.65981	-54.0	11.2	-81.0	36.0	3.67762	0.842	-89.1	68.5	39.7	32.7	27.7	0.	1-2
3	-11.386	-20.004	377.61741	-53.6	10.7	-80.7	36.2	3.62831	0.856	-88.4	68.2	40.8	31.2	26.4	9.62678	2-3
4	-11.348	-19.451	385.08092	-56.1	11.4	-80.7	35.4	3.69987	0.835	-88.3	68.8	38.6	33.4	29.2	16.44955	3-4
5	-11.628	-19.388	388.17790	-54.3	11.6	-81.3	36.0	3.72976	0.827	-89.8	68.8	38.6	34.3	29.0	8.67044	4-5
6	-11.650	-19.949	380.47369	-51.7	10.9	-81.3	36.7	3.65561	0.848	-89.8	68.3	40.8	32.0	26.2	16.65885	5-6
7	-11.386	-20.004	377.61741	-53.6	10.7	-80.7	36.2	3.62831	0.856	-88.4	68.2	40.8	31.2	26.4	8.16409	6-7

JULY 31, 1964 13 HR 23 MIN 25 SEC 621 MS

TAB NO 71

ATLAS PHOTO NO 71

POD SEQUENCE NO 809

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		143.178	328.65073	-8.711	-24.740	2064.106	2.437	-66.881	115.488							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.493	-19.709	378.40583	-54.0	11.2	-81.0	36.0	3.63674	0.842	-89.1	68.5	39.7	32.7	27.7	0.	1-2
3	-11.379	-20.008	373.42082	-53.6	10.7	-80.7	36.1	3.58799	0.856	-88.4	68.2	40.8	31.1	26.4	9.51909	2-3
4	-11.342	-19.461	380.79935	-56.1	11.4	-80.7	35.4	3.65873	0.835	-88.3	68.7	38.6	33.4	29.2	16.26579	3-4
5	-11.618	-19.399	383.86035	-54.3	11.6	-81.3	36.0	3.68828	0.827	-89.8	68.8	38.6	34.2	29.0	8.57344	4-5
6	-11.640	-19.954	376.24408	-51.7	10.9	-81.3	36.7	3.61497	0.848	-89.8	68.3	40.8	32.0	26.2	16.47257	5-6
7	-11.379	-20.008	373.42082	-53.6	10.7	-80.7	36.1	3.58799	0.856	-88.4	68.2	40.8	31.1	26.4	8.07292	6-7

JULY 31, 1964 13 HR 23 MIN 27 SEC 301 MS

TAB NO 72

ATLAS PHOTO NO 72

POD SEQUENCE NO 811

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		141.499	324.88437	-8.730	-24.699	2060.340	2.439	-66.854	115.481							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.484	-19.716	374.14741	-54.0	11.2	-81.0	36.0	3.59581	0.842	-89.1	68.5	39.7	32.7	27.7	0.	1-2
3	-11.372	-20.012	369.21982	-53.6	10.7	-80.7	36.1	3.54762	0.856	-88.4	68.2	40.8	31.1	26.4	9.41127	2-3
4	-11.335	-19.472	376.51336	-56.1	11.4	-80.7	35.4	3.61755	0.835	-88.3	68.7	38.6	33.4	29.1	16.08187	3-4
5	-11.608	-19.410	379.53835	-54.3	11.6	-81.3	35.9	3.64675	0.827	-89.8	68.8	38.6	34.2	29.0	8.47624	4-5
6	-11.630	-19.958	372.01011	-51.7	10.9	-81.3	36.7	3.57429	0.848	-89.8	68.3	40.8	32.0	26.2	16.28609	5-6
7	-11.372	-20.012	369.21982	-53.6	10.7	-80.7	36.1	3.54762	0.856	-88.4	68.2	40.8	31.1	26.4	7.98165	6-7

RA-VII CAMERA P1

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TAB NO 73																	ATLAS PHOTO NO 73					POD SEQUENCE NO 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RA-VII CAMERA P1

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JULY 31, 1964 13 HR 23 MIN 39 SEC .60 MS TAB NO 79 ATLAS PHOTO NO 79 POD SEQUENCE NO 825

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				129.739		298.46565		-8.866		-24.409		2033.921		2.451		-66.661		115.432	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.423	-19.772	344.21815	-54.0	11.1	-81.0	36.0	3.30817	0.842	-89.1	68.5	39.7	32.6	27.6	0.	1-2			
3	-11.319	-20.043	339.69423	-53.6	10.7	-80.7	36.1	3.26393	0.857	-88.4	68.2	40.8	31.1	26.3	8.65355	2-3			
4	-11.285	-19.547	346.39059	-56.2	11.3	-80.7	35.4	3.32813	0.836	-88.3	68.7	38.6	33.3	29.1	14.78927	3-4			
5	-11.536	-19.490	349.16263	-54.3	11.6	-81.3	35.9	3.35489	0.828	-89.8	68.7	38.5	34.1	28.9	7.79411	4-5			
6	-11.557	-19.994	342.25243	-51.8	10.9	-81.3	36.6	3.28838	0.849	-89.8	68.3	40.7	32.0	26.2	14.97574	5-6			
7	-11.319	-20.043	339.69423	-53.6	10.7	-80.7	36.1	3.26393	0.857	-88.4	68.2	40.8	31.1	26.3	7.34022	6-7			

JULY 31, 1964 13 HR 23 MIN 40 SEC .740 MS TAB NO 80 ATLAS PHOTO NO 80 POD SEQUENCE NO 827

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				128.059		294.68358		-8.886		-24.367		2030.139		2.453		-66.633		115.425	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.414	-19.780	339.92675	-54.0	11.1	-81.0	36.0	3.26693	0.843	-89.1	68.4	39.7	32.6	27.6	0.	1-2			
3	-11.311	-20.048	335.46061	-53.6	10.7	-80.7	36.1	3.22325	0.857	-88.4	68.2	40.8	31.1	26.3	8.54498	2-3			
4	-11.278	-19.558	342.07146	-56.2	11.3	-80.7	35.4	3.28663	0.836	-88.3	68.6	38.6	33.3	29.1	14.60400	3-4			
5	-11.526	-19.502	344.80736	-54.3	11.5	-81.3	35.9	3.31304	0.828	-89.8	68.7	38.5	34.1	28.9	7.69637	4-5			
6	-11.546	-20.000	337.98562	-51.8	10.9	-81.3	36.6	3.24738	0.849	-89.8	68.2	40.7	31.9	26.2	14.78792	5-6			
7	-11.311	-20.048	335.46061	-53.6	10.7	-80.7	36.1	3.22325	0.857	-88.4	68.2	40.8	31.1	26.3	7.24830	6-7			

JULY 31, 1964 13 HR 23 MIN 42 SEC .420 MS TAB NO 81 ATLAS PHOTO NO 81 POD SEQUENCE NO 829

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				126.379		290.89925		-8.906		-24.325		2026.355		2.455		-66.604		115.418	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.405	-19.788	335.63107	-54.0	11.1	-81.0	36.0	3.22564	0.843	-89.1	68.4	39.7	32.6	27.6	0.	1-2			
3	-11.304	-20.053	331.22277	-53.6	10.7	-80.7	36.1	3.18253	0.857	-88.4	68.2	40.8	31.1	26.3	8.43621	2-3			
4	-11.271	-19.569	337.74808	-56.2	11.3	-80.7	35.4	3.24509	0.836	-88.3	68.6	38.6	33.3	29.1	14.41856	3-4			
5	-11.516	-19.513	340.44783	-54.3	11.5	-81.3	35.9	3.27115	0.828	-89.8	68.7	38.5	34.1	28.9	7.59852	4-5			
6	-11.535	-20.005	333.71460	-51.8	10.9	-81.3	36.6	3.20635	0.849	-89.8	68.2	40.7	31.9	26.2	14.59996	5-6			
7	-11.304	-20.053	331.22277	-53.6	10.7	-80.7	36.1	3.18253	0.857	-88.4	68.2	40.8	31.1	26.3	7.15618	6-7			

JULY 31, 1964 13 HR 23 MIN 44 SEC .100 MS TAB NO 82 ATLAS PHOTO NO 82 POD SEQUENCE NO 831

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				124.700		287.11314		-8.926		-24.282		2022.568		2.457		-66.576		115.411	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.396	-19.796	331.33148	-54.0	11.1	-81.0	36.0	3.18432	0.843	-89.1	68.4	39.7	32.6	27.6	0.	1-2			
3	-11.296	-20.058	326.98104	-53.6	10.7	-80.7	36.1	3.14177	0.857	-88.4	68.2	40.8	31.1	26.3	8.32747	2-3			
4	-11.263	-19.580	333.42072	-56.2	11.3	-80.7	35.4	3.20352	0.836	-88.3	68.6	38.6	33.3	29.0	14.23293	3-4			
5	-11.505	-19.525	336.08434	-54.3	11.5	-81.3	35.9	3.22923	0.828	-89.8	68.7	38.5	34.1	28.9	7.50069	4-5			
6	-11.525	-20.010	329.43970	-51.8	10.9	-81.3	36.5	3.16528	0.849	-89.8	68.2	40.7	31.9	26.2	14.41183	5-6			
7	-11.296	-20.058	326.98104	-53.6	10.7	-80.7	36.1	3.14177	0.857	-88.4	68.2	40.8	31.1	26.3	7.06416	6-7			

JULY 31, 1964 13 HR 23 MIN 45 SEC .780 MS TAB NO 83 ATLAS PHOTO NO 83 POD SEQUENCE NO 833

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				123.020		283.32484		-8.946		-24.240		2018.780		2.459		-66.548		115.404	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.387	-19.805	327.02658	-54.0	11.1	-81.0	36.0	3.14295	0.843	-89.1	68.4	39.7	32.6	27.6	0.	1-2			
3	-11.288	-20.063	322.73412	-53.6	10.7	-80.7	36.1	3.10097	0.857	-88.4	68.2	40.8	31.1	26.3	8.21853	2-3			
4	-11.256	-19.591	329.08788	-56.2	11.3	-80.7	35.4	3.16189	0.837	-88.3	68.6	38.6	33.2	29.0	14.04699	3-4			
5	-11.495	-19.537	331.71540	-54.3	11.5	-81.3	35.9	3.18725	0.828	-89.8	68.7	38.5	34.1	28.9	7.40256	4-5			
6	-11.514	-20.016	325.15966	-51.8	10.9	-81.3	36.5	3.12415	0.849	-89.8	68.2	40.7	31.9	26.2	14.22336	5-6			
7	-11.288	-20.063	322.73412	-53.6	10.7	-80.7	36.1	3.10097	0.857	-88.4	68.2	40.8	31.1	26.3	6.97205	6-7			

JULY 31, 1964 13 HR 23 MIN 47 SEC .460 MS TAB NO 84 ATLAS PHOTO NO 84 POD SEQUENCE NO 835

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				121.340		279.53461		-8.966		-24.197		2014.990		2.461		-66.519		115.397	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.378	-19.813	322.71782	-54.0	11.1	-81.0	36.0	3.10154	0.843	-89.1	68.4	39.7	32.5	27.6	0.	1-2			
3	-11.281	-20.068	318.48338	-53.6	10.7	-80.7	36.1	3.06013	0.857	-88.4	68.2	40.8	31.1	26.3	8.10948	2-3			
4	-11.249	-19.602	324.75119	-56.2	11.3	-80.7	35.4	3.12022	0.837	-88.3	68.6	38.6	33.2	29.0	13.86092	3-4			
5	-11.484	-19.549	327.34265	-54.3	11.5	-81.3	35.9	3.14523	0.829	-89.8	68.7	38.5	34.1	28.8	7.30453	4-5			
6	-11.503	-20.022	320.87576	-51.8	10.9	-81.3	36.5	3.08299	0.849	-89.8	68.2	40.7	31.9	26.2	14.03476	5-6			
7	-11.281	-20.068	318.48338	-53.6	10.7	-80.7	36.1	3.06013	0.857	-88.4	68.2	40.8	31.1	26.3	6.87973	6-7			

RA-VII CAMERA PJ

15

JULY 31, 1964 13 HR 23 MIN 49 SEC 140 MS

TAB NO 85 ATLAS PHOTO NO 85 POD SEQUENCE NO 837

TRAJECTORY DATA SEC TO IMPACT 119.660 ALT 275.74210 LAT -8.986 LON -24.154 R 2011.197 V 2.462 PTH -66.491 AZ 115.389

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.369	-19.822	318.40486	-54.0	11.1	-81.0	36.0	3.06009	0.843	-89.1	68.4	39.7	32.5	27.6	0.	1-2
3	-11.273	-20.073	314.22846	-53.7	10.7	-80.7	36.1	3.01924	0.857	-88.4	68.1	40.8	31.0	26.3	8.00037	2-3
4	-11.241	-19.614	320.41028	-56.2	11.3	-80.7	35.4	3.07851	0.837	-88.3	68.6	38.6	33.2	29.0	13.67470	3-4
5	-11.474	-19.561	322.96563	-54.3	11.5	-81.3	35.9	3.10318	0.829	-89.8	68.7	38.5	34.0	28.8	7.20639	4-5
6	-11.493	-20.028	316.58770	-51.8	10.9	-81.3	36.5	3.04179	0.849	-89.8	68.2	40.7	31.9	26.1	13.84600	5-6
7	-11.273	-20.073	314.22846	-53.7	10.7	-80.7	36.1	3.01924	0.857	-88.4	68.1	40.8	31.0	26.3	6.78742	6-7

JULY 31, 1964 13 HR 23 MIN 50 SEC 819 MS

TAB NO 86 ATLAS PHOTO NO 86 POD SEQUENCE NO 839

TRAJECTORY DATA SEC TO IMPACT 117.980 ALT 271.94777 LAT -9.006 LON -24.111 R 2007.403 V 2.464 PTH -66.462 AZ 115.382

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.360	-19.830	314.08815	-54.0	11.1	-81.0	36.0	3.01860	0.843	-89.1	68.4	39.7	32.5	27.6	0.	1-2
3	-11.265	-20.078	309.96982	-53.7	10.7	-80.7	36.1	2.97832	0.857	-88.4	68.1	40.8	31.0	26.3	7.89116	2-3
4	-11.234	-19.625	316.06563	-56.2	11.3	-80.6	35.4	3.03677	0.837	-88.3	68.6	38.6	33.2	29.0	13.48832	3-4
5	-11.463	-19.574	318.58490	-54.3	11.5	-81.3	35.9	3.06108	0.829	-89.8	68.7	38.5	34.0	28.8	7.10817	4-5
6	-11.482	-20.033	312.24592	-51.9	10.9	-81.3	36.5	3.00056	0.849	-89.8	68.2	40.7	31.9	26.1	13.65711	5-6
7	-11.265	-20.078	309.96982	-53.7	10.7	-80.7	36.1	2.97832	0.857	-88.4	68.1	40.8	31.0	26.3	6.69500	6-7

JULY 31, 1964 13 HR 23 MIN 52 SEC 499 MS

TAB NO 87 ATLAS PHOTO NO 87 POD SEQUENCE NO 841

TRAJECTORY DATA SEC TO IMPACT 116.300 ALT 268.15137 LAT -9.027 LON -24.068 R 2003.607 V 2.466 PTH -66.434 AZ 115.375

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.351	-19.839	309.76743	-54.0	11.1	-81.0	36.0	2.97707	0.843	-89.1	68.4	39.7	32.5	27.6	0.	1-2
3	-11.258	-20.083	305.70717	-53.7	10.7	-80.7	36.0	2.93737	0.857	-88.4	68.1	40.8	31.0	26.3	7.78189	2-3
4	-11.227	-19.637	311.71695	-56.2	11.3	-80.6	35.4	2.99499	0.837	-88.3	68.6	38.6	33.2	29.0	13.30178	3-4
5	-11.453	-19.586	314.20012	-54.3	11.5	-81.3	35.9	3.01895	0.829	-89.8	68.6	38.5	34.0	28.8	7.00983	4-5
6	-11.471	-20.039	308.00013	-51.9	10.9	-81.3	36.5	2.95928	0.849	-89.8	68.2	40.7	31.9	26.1	13.46808	5-6
7	-11.258	-20.083	305.70717	-53.7	10.7	-80.7	36.0	2.93737	0.857	-88.4	68.1	40.8	31.0	26.3	6.60247	6-7

JULY 31, 1964 13 HR 23 MIN 54 SEC 179 MS

TAB NO 88 ATLAS PHOTO NO 88 POD SEQUENCE NO 843

TRAJECTORY DATA SEC TO IMPACT 114.620 ALT 264.35289 LAT -9.047 LON -24.024 R 1999.808 V 2.468 PTH -66.405 AZ 115.367

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.342	-19.848	305.44268	-54.0	11.1	-81.0	36.0	2.93551	0.843	-89.1	68.4	39.7	32.5	27.6	0.	1-2
3	-11.250	-20.088	301.44055	-53.7	10.7	-80.7	36.0	2.89637	0.857	-88.4	68.1	40.8	31.0	26.3	7.67249	2-3
4	-11.219	-19.648	307.36425	-56.2	11.3	-80.6	35.4	2.95317	0.837	-88.3	68.6	38.6	33.2	29.0	13.11511	3-4
5	-11.442	-19.598	309.81135	-54.3	11.5	-81.3	35.9	2.97678	0.829	-89.8	68.6	38.5	34.0	28.8	6.91140	4-5
6	-11.460	-20.045	303.70033	-51.9	10.9	-81.3	36.5	2.91797	0.849	-89.8	68.2	40.7	31.9	26.1	13.27890	5-6
7	-11.250	-20.088	301.44055	-53.7	10.7	-80.7	36.0	2.89637	0.857	-88.4	68.1	40.8	31.0	26.3	6.50995	6-7

JULY 31, 1964 13 HR 23 MIN 55 SEC 859 MS

TAB NO 89 ATLAS PHOTO NO 89 POD SEQUENCE NO 845

TRAJECTORY DATA SEC TO IMPACT 112.940 ALT 260.55228 LAT -9.067 LON -23.981 R 1996.008 V 2.470 PTH -66.376 AZ 115.360

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.332	-19.856	301.11384	-54.1	11.1	-81.0	35.9	2.89391	0.843	-89.1	68.4	39.7	32.5	27.5	0.	1-2
3	-11.242	-20.094	297.16982	-53.7	10.7	-80.7	36.0	2.85534	0.857	-88.4	68.1	40.8	31.0	26.3	7.56304	2-3
4	-11.212	-19.660	303.06742	-56.2	11.3	-80.6	35.4	2.91131	0.837	-88.3	68.5	38.6	33.2	29.0	12.92828	3-4
5	-11.432	-19.610	305.41843	-54.4	11.5	-81.3	35.9	2.93458	0.829	-89.8	68.6	38.5	34.0	28.8	6.81306	4-5
6	-11.450	-20.051	299.39646	-51.9	10.8	-81.3	36.5	2.87662	0.850	-89.8	68.2	40.7	31.9	26.1	13.08954	5-6
7	-11.242	-20.094	297.16982	-53.7	10.7	-80.7	36.0	2.85534	0.857	-88.4	68.1	40.8	31.0	26.3	6.41732	6-7

JULY 31, 1964 13 HR 23 MIN 57 SEC 539 MS

TAB NO 90 ATLAS PHOTO NO 90 POD SEQUENCE NO 847

TRAJECTORY DATA SEC TO IMPACT 111.260 ALT 256.74965 LAT -9.088 LON -23.937 R 1992.205 V 2.472 PTH -66.347 AZ 115.352

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.323	-19.865	296.78104	-54.1	11.1	-81.0	35.9	2.85227	0.844	-89.1	68.4	39.7	32.5	27.5	0.	1-2
3	-11.234	-20.099	292.89516	-53.7	10.7	-80.7	36.0	2.81426	0.857	-88.4	68.1	40.8	31.0	26.3	7.45353	2-3
4	-11.204	-19.671	298.64661	-56.2	11.3	-80.6	35.4	2.86941	0.837	-88.3	68.5	38.6	33.1	28.9	12.74128	3-4
5	-11.421	-19.623	301.02157	-54.4	11.5	-81.3	35.9	2.89233	0.829	-89.8	68.6	38.5	34.0	28.8	6.71443	4-5
6	-11.439	-20.057	295.08863	-51.9	10.8	-81.3	36.5	2.83523	0.850	-89.8	68.2	40.7	31.9	26.1	12.90006	5-6
7	-11.234	-20.099	292.89516	-53.7	10.7	-80.7	36.0	2.81426	0.857	-88.4	68.1	40.8	31.0	26.3	6.32459	6-7

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JULY 31, 1964 13 HR 23 MIN 59 SEC 219 MS TAB NO 91 ATLAS PHOTO NO 91 POD SEQUENCE NO 849

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		109.580	252.94489	-9.108	-23.893	1988.400	2.474	-66.318	115.345							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.314	-19.874	292.44375	-54.1	11.1	-81.0	35.9	2.81058	0.844	-89.0	68.3	39.7	32.5	27.5	0.	1-2
3	-11.226	-20.105	288.61609	-53.7	10.7	-80.7	36.0	2.77315	0.857	-88.4	68.1	40.8	31.0	26.3	7.34384	2-3
4	-11.197	-19.683	294.28133	-56.2	11.3	-80.6	35.4	2.82746	0.838	-88.3	68.5	38.6	33.1	28.9	12.55415	3-4
5	-11.410	-19.635	296.62018	-54.4	11.5	-81.2	35.9	2.85004	0.830	-89.8	68.6	38.5	34.0	28.8	6.61578	4-5
6	-11.428	-20.063	290.77639	-51.9	10.8	-81.3	36.5	2.79380	0.850	-89.8	68.2	40.7	31.8	26.1	12.71038	5-6
7	-11.226	-20.105	288.61609	-53.7	10.7	-80.7	36.0	2.77315	0.857	-88.4	68.1	40.8	31.0	26.3	6.23166	6-7

JULY 31, 1964 13 HR 24 MIN 0 SEC 899 MS TAB NO 92 ATLAS PHOTO NO 92 POD SEQUENCE NO 851

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		107.901	249.13817	-9.129	-23.849	1984.593	2.476	-66.288	115.337							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.305	-19.883	288.10158	-54.1	11.1	-81.0	35.9	2.76885	0.844	-89.0	68.3	39.7	32.5	27.5	0.	1-2
3	-11.218	-20.110	284.33221	-53.7	10.7	-80.7	36.0	2.73199	0.857	-88.4	68.1	40.8	31.0	26.3	7.23408	2-3
4	-11.189	-19.635	292.91106	-56.2	11.3	-80.6	35.4	2.78548	0.838	-88.3	68.5	38.6	33.1	28.9	12.36670	3-4
5	-11.400	-19.648	292.21383	-54.4	11.5	-81.2	35.9	2.80770	0.830	-89.8	68.6	38.5	33.9	28.7	6.51703	4-5
6	-11.417	-20.069	286.45934	-51.9	10.8	-81.3	36.4	2.75232	0.850	-89.8	68.2	40.7	31.8	26.1	12.52047	5-6
7	-11.218	-20.110	284.33221	-53.7	10.7	-80.7	36.0	2.73199	0.857	-88.4	68.1	40.8	31.0	26.3	6.13891	6-7

JULY 31, 1964 13 HR 24 MIN 2 SEC 579 MS TAB NO 93 ATLAS PHOTO NO 93 POD SEQUENCE NO 853

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		106.221	245.32909	-9.150	-23.804	1980.784	2.478	-66.259	115.330							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.295	-19.892	283.75506	-54.1	11.1	-81.0	35.9	2.72708	0.844	-89.0	68.3	39.7	32.4	27.5	0.	1-2
3	-11.210	-20.116	280.04398	-53.7	10.7	-80.7	36.0	2.69078	0.857	-88.4	68.1	40.8	31.0	26.3	7.12421	2-3
4	-11.182	-19.707	285.53645	-56.2	11.3	-80.6	35.4	2.74344	0.838	-88.3	68.5	38.6	33.1	28.9	12.17915	3-4
5	-11.389	-19.661	287.80312	-54.4	11.5	-81.2	35.9	2.76532	0.830	-89.8	68.6	38.5	33.9	28.7	6.41818	4-5
6	-11.406	-20.076	282.13794	-51.9	10.8	-81.3	36.4	2.71080	0.850	-89.8	68.2	40.7	31.8	26.1	12.33040	5-6
7	-11.210	-20.116	280.04398	-53.7	10.7	-80.7	36.0	2.69078	0.857	-88.4	68.1	40.8	31.0	26.3	6.04596	6-7

JULY 31, 1964 13 HR 24 MIN 4 SEC 259 MS TAB NO 94 ATLAS PHOTO NO 94 POD SEQUENCE NO 855

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		104.541	241.51810	-9.170	-23.760	1976.973	2.480	-66.230	115.322							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.286	-19.901	279.40468	-54.1	11.1	-81.0	35.9	2.68527	0.844	-89.0	68.3	39.7	32.4	27.5	0.	1-2
3	-11.202	-20.121	275.75191	-53.7	10.7	-80.7	36.0	2.64954	0.858	-88.4	68.1	40.8	31.0	26.3	7.01428	2-3
4	-11.174	-19.719	281.15796	-56.2	11.3	-80.6	35.4	2.70138	0.838	-88.3	68.5	38.6	33.1	28.9	11.99142	3-4
5	-11.378	-19.673	283.38857	-54.4	11.5	-81.2	35.9	2.72290	0.830	-89.8	68.5	38.5	33.9	28.7	6.31933	4-5
6	-11.395	-20.082	277.81270	-51.9	10.8	-81.3	36.4	2.66924	0.850	-89.8	68.2	40.7	31.8	26.1	12.14021	5-6
7	-11.202	-20.121	275.75191	-53.7	10.7	-80.7	36.0	2.64954	0.858	-88.4	68.1	40.8	31.0	26.3	5.95291	6-7

JULY 31, 1964 13 HR 24 MIN 5 SEC 939 MS TAB NO 95 ATLAS PHOTO NO 95 POD SEQUENCE NO 857

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		102.861	237.70499	-9.191	-23.715	1973.160	2.481	-66.200	115.314							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.277	-19.911	275.05020	-54.1	11.1	-81.0	35.9	2.64342	0.844	-89.0	68.3	39.7	32.4	27.5	0.	1-2
3	-11.194	-20.127	271.45579	-53.7	10.7	-80.7	36.0	2.60826	0.858	-88.4	68.1	40.8	31.0	26.3	6.90420	2-3
4	-11.167	-19.731	276.77538	-56.2	11.3	-80.6	35.4	2.65927	0.838	-88.3	68.5	38.6	33.1	28.9	11.80355	3-4
5	-11.367	-19.686	278.96992	-54.4	11.5	-81.2	35.9	2.68045	0.830	-89.8	68.5	38.5	33.9	28.7	6.22028	4-5
6	-11.384	-20.088	273.48339	-51.9	10.8	-81.3	36.4	2.62764	0.850	-89.8	68.1	40.7	31.8	26.1	11.94984	5-6
7	-11.194	-20.127	271.45579	-53.7	10.7	-80.7	36.0	2.60826	0.858	-88.4	68.1	40.8	31.0	26.3	5.85975	6-7

JULY 31, 1964 13 HR 24 MIN 7 SEC 618 MS TAB NO 96 ATLAS PHOTO NO 96 POD SEQUENCE NO 859

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		101.181	233.88980	-9.212	-23.670	1969.345	2.483	-66.170	115.306							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.267	-19.920	270.69167	-54.1	11.1	-81.0	35.9	2.60153	0.844	-89.0	68.3	39.7	32.4	27.5	0.	1-2
3	-11.186	-20.133	267.15562	-53.7	10.7	-80.7	36.0	2.56695	0.858	-88.4	68.1	40.8	31.0	26.3	6.79410	2-3
4	-11.159	-19.743	272.38874	-56.2	11.3	-80.6	35.4	2.61712	0.838	-88.3	68.5	38.6	33.1	28.9	11.61556	3-4
5	-11.357	-19.699	274.54722	-54.4	11.5	-81.2	35.9	2.63795	0.830	-89.8	68.5	38.5	33.9	28.7	6.12132	4-5
6	-11.373	-20.095	269.15005	-51.9	10.8	-81.3	36.4	2.58601	0.850	-89.8	68.1	40.7	31.8	26.1	11.75933	5-6
7	-11.186	-20.133	267.15562	-53.7	10.7	-80.7	36.0	2.56695	0.858	-88.4	68.1	40.8	31.0	26.3	5.76660	6-7

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TAB NO 97														ATLAS PHOTO NO 97				POD SEQUENCE NO 861							
JULY 31, 1964 13 HR 24 MIN 9 SEC 298 MS																									
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ							
				99.501		236.07254		-9.233		-23.625		1965.528		2.485		-66.141		115.299							
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-11.258	-19.929	266.32907	-54.1	11.1	-81.0	35.9	2.55960	0.844	-89.0	68.3	39.7	32.4	27.5	0.	1-2									
3	-11.178	-20.139	262.85140	-53.7	10.7	-80.7	36.0	2.52559	0.858	-88.4	68.1	40.8	31.0	26.2	6.68389	2-3									
4	-11.151	-19.755	267.99804	-56.2	11.3	-80.6	35.4	2.57493	0.838	-88.3	68.4	38.6	33.1	28.9	11.42741	3-4									
5	-11.346	-19.712	270.12043	-54.4	11.5	-81.2	35.8	2.59542	0.831	-89.8	68.5	38.5	33.9	28.7	6.02216	4-5									
6	-11.362	-20.101	264.81265	-51.9	10.8	-81.3	36.4	2.54434	0.850	-89.8	68.1	40.7	31.8	26.1	11.56868	5-6									
7	-11.178	-20.139	262.85140	-53.7	10.7	-80.7	36.0	2.52559	0.858	-88.4	68.1	40.8	31.0	26.2	5.67325	6-7									
TAB NO 98														ATLAS PHOTO NO 98				POD SEQUENCE NO 863							
JULY 31, 1964 13 HR 24 MIN 10 SEC 978 MS																									
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ							
				97.821		226.25296		-9.254		-23.580		1961.708		2.487		-66.111		115.291							
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-11.249	-19.939	261.96210	-54.1	11.0	-81.0	35.9	2.51763	0.845	-89.0	68.3	39.7	32.4	27.5	0.	1-2									
3	-11.170	-20.145	258.54281	-53.7	10.7	-80.7	36.0	2.48419	0.858	-88.4	68.1	40.8	30.9	26.2	6.57359	2-3									
4	-11.144	-19.767	263.60294	-56.2	11.3	-80.6	35.4	2.53271	0.839	-88.3	68.4	38.6	33.0	28.8	11.23908	3-4									
5	-11.335	-19.725	265.68927	-54.4	11.4	-81.2	35.8	2.55284	0.831	-89.8	68.5	38.5	33.8	28.7	5.92291	4-5									
6	-11.351	-20.108	260.47088	-52.0	10.8	-81.3	36.4	2.50262	0.850	-89.8	68.1	40.8	31.8	26.1	11.37789	5-6									
7	-11.170	-20.145	258.54281	-53.7	10.7	-80.7	36.0	2.48419	0.858	-88.4	68.1	40.8	30.9	26.2	5.57998	6-7									
TAB NO 99														ATLAS PHOTO NO 99				POD SEQUENCE NO 865							
JULY 31, 1964 13 HR 24 MIN 12 SEC 658 MS																									
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ							
				96.141		222.43143		-9.275		-23.535		1957.887		2.489		-66.081		115.283							
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-11.239	-19.948	257.59123	-54.1	11.0	-81.0	35.9	2.47563	0.845	-89.0	68.3	39.7	32.4	27.5	0.	1-2									
3	-11.162	-20.151	254.23035	-53.7	10.7	-80.7	36.0	2.44275	0.858	-88.4	68.1	40.8	30.9	26.2	6.46319	2-3									
4	-11.136	-19.780	259.20395	-56.2	11.3	-80.6	35.4	2.49044	0.839	-88.3	68.4	38.6	33.0	28.8	11.05063	3-4									
5	-11.324	-19.738	261.25423	-54.4	11.4	-81.2	35.8	2.51023	0.831	-89.8	68.5	38.5	33.8	28.7	5.82366	4-5									
6	-11.339	-20.114	256.12523	-52.0	10.8	-81.3	36.4	2.46087	0.851	-89.8	68.1	40.8	31.8	26.1	11.18696	5-6									
7	-11.162	-20.151	254.23035	-53.7	10.7	-80.7	36.0	2.44275	0.858	-88.4	68.1	40.8	30.9	26.2	5.48652	6-7									
TAB NO 100														ATLAS PHOTO NO 100				POD SEQUENCE NO 867							
JULY 31, 1964 13 HR 24 MIN 14 SEC 338 MS																									
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ							
				94.461		218.60776		-9.297		-23.489		1954.063		2.491		-66.051		115.275							
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-11.230	-19.957	253.21616	-54.1	11.0	-81.0	35.9	2.43358	0.845	-89.0	68.3	39.7	32.4	27.4	0.	1-2									
3	-11.154	-20.157	249.91370	-53.7	10.6	-80.7	36.0	2.40128	0.858	-88.4	68.1	40.8	30.9	26.2	6.35275	2-3									
4	-11.128	-19.792	254.80072	-56.2	11.3	-80.6	35.4	2.44813	0.839	-88.3	68.4	38.6	33.0	28.8	10.86200	3-4									
5	-11.313	-19.751	256.81496	-54.4	11.4	-81.2	35.8	2.46758	0.831	-89.8	68.5	38.5	33.8	28.6	5.72430	4-5									
6	-11.328	-20.121	251.77543	-52.0	10.8	-81.3	36.4	2.41907	0.851	-89.8	68.1	40.8	31.7	26.1	10.99584	5-6									
7	-11.154	-20.157	249.91370	-53.7	10.6	-80.7	36.0	2.40128	0.858	-88.4	68.1	40.8	30.9	26.2	5.39297	6-7									
TAB NO 101														ATLAS PHOTO NO 101				POD SEQUENCE NO 869							
JULY 31, 1964 13 HR 24 MIN 16 SEC 18 MS																									
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ							
				92.781		214.78185		-9.318		-23.444		1950.237		2.493		-66.021		115.267							
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-11.220	-19.967	248.83681	-54.1	11.0	-81.0	35.9	2.39149	0.845	-89.0	68.2	39.7	32.3	27.4	0.	1-2									
3	-11.145	-20.163	245.59279	-53.7	10.6	-80.7	36.0	2.35976	0.858	-88.4	68.1	40.8	30.9	26.2	6.24223	2-3									
4	-11.121	-19.805	250.39315	-56.2	11.3	-80.6	35.4	2.40579	0.839	-88.3	68.4	38.6	33.0	28.8	10.67317	3-4									
5	-11.302	-19.764	252.37141	-54.4	11.4	-81.2	35.8	2.42488	0.831	-89.8	68.5	38.6	33.8	28.6	5.62486	4-5									
6	-11.317	-20.128	247.42141	-52.0	10.8	-81.3	36.4	2.37724	0.851	-89.8	68.1	40.8	31.7	26.0	10.80456	5-6									
7	-11.145	-20.163	245.59279	-53.7	10.6	-80.7	36.0	2.35976	0.858	-88.4	68.1	40.8	30.9	26.2	5.29950	6-7									
TAB NO 102														ATLAS PHOTO NO 102				POD SEQUENCE NO 871							
JULY 31, 1964 13 HR 24 MIN 17 SEC 698 MS																									
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ							
				91.102		210.95396		-9.339		-23.398		1946.409		2.495		-65.990		115.259							
PHOTO DATA																									
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT									
2	-11.211	-19.977	244.45344	-54.1	11.0	-81.0	35.9	2.34936	0.845	-89.0	68.2	39.7	32.3	27.4	0.	1-2									
3	-11.137	-20.169	241.26790	-53.7	10.6	-80.7	36.0	2.31821	0.858	-88.4	68.0	40.8	30.9	26.2	6.13158	2-3									
4	-11.113	-19.817	245.98158	-56.2	11.3	-80.6	35.4	2.36340	0.839	-88.3	68.4	38.6	33.0	28.8	10.48422	3-4									
5	-11.291	-19.777	247.92385	-54.4	11.4	-81.2	35.8	2.38215	0.831	-89.7	68.4	38.6	33.8	28.6	5.52532	4-5									
6	-11.306	-20.134	243.06339	-52.0	10.8	-81.3	36.4	2.33537	0.851	-89.8	68.1	40.8	31.7	26.0	10.61312	5-6									
7	-11.137	-20.169	241.26790	-53.7	10.6	-80.7	36.0	2.31821	0.858	-88.4	68.0	40.8	30.9	26.2	5.20575	6-7									

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JULY 31, 1964 13 HR 24 MIN 19 SEC 378 MS TAB NO 103 ATLAS PHOTO NO 103 POD SEQUENCE NO 873

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
PHOTO DATA				89.422				207.12384	-9.361	-23.352	1942.579	2.497	-65.960	115.251		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.201	-19.986	240.06579	-54.1	11.0	-81.0	35.9	2.30719	0.845	-89.0	68.2	39.7	32.3	27.4	0.	1-2
3	-11.129	-20.175	236.93872	-53.7	10.6	-80.7	36.0	2.27661	0.858	-88.4	68.0	40.8	30.9	26.2	6.02087	2-3
4	-11.105	-19.830	241.56571	-56.2	11.3	-80.6	35.4	2.32097	0.839	-88.3	68.4	38.6	33.0	28.8	10.29510	3-4
5	-11.280	-19.791	243.47202	-54.4	11.4	-81.2	35.8	2.33937	0.832	-89.7	68.4	38.6	33.8	28.6	5.42577	4-5
6	-11.294	-20.141	238.70109	-52.0	10.8	-81.3	36.4	2.29346	0.851	-89.8	68.1	40.8	31.7	26.0	10.42155	5-6
7	-11.129	-20.175	236.93872	-53.7	10.6	-80.7	36.0	2.27661	0.858	-88.4	68.0	40.8	30.9	26.2	5.11209	6-7

JULY 31, 1964 13 HR 24 MIN 21 SEC 58 MS TAB NO 104 ATLAS PHOTO NO 104 POD SEQUENCE NO 875

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				87.742				203.29152	-9.382	-23.305	1938.747	2.499	-65.929	115.243		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.191	-19.996	235.67389	-54.1	11.0	-81.0	35.9	2.26499	0.845	-89.0	68.2	39.7	32.3	27.4	0.	1-2
3	-11.121	-20.181	232.60531	-53.7	10.6	-80.7	36.0	2.23497	0.858	-88.4	68.0	40.8	30.9	26.2	5.91002	2-3
4	-11.097	-19.842	237.14558	-56.1	11.3	-80.6	35.4	2.27850	0.839	-88.3	68.4	38.6	33.0	28.8	10.10584	3-4
5	-11.269	-19.804	239.01592	-54.4	11.4	-81.2	35.8	2.29656	0.832	-89.7	68.4	38.6	33.7	28.6	5.32612	4-5
6	-11.283	-20.148	234.33455	-52.0	10.8	-81.3	36.3	2.25150	0.851	-89.8	68.1	40.8	31.7	26.0	10.22984	5-6
7	-11.121	-20.181	232.60531	-53.7	10.6	-80.7	36.0	2.23497	0.858	-88.4	68.0	40.8	30.9	26.2	5.01813	6-7

JULY 31, 1964 13 HR 24 MIN 22 SEC 738 MS TAB NO 105 ATLAS PHOTO NO 105 POD SEQUENCE NO 877

TRAJECTORY DATA			SEC TO IMPACT					ALT	LAT	LON	R	V	PTH	AZ		
			86.062					199.45724	-9.404	-23.259	1934.913	2.501	-65.899	115.235		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.182	-20.006	231.27791	-54.1	11.0	-81.0	35.9	2.22274	0.845	-89.0	68.2	39.7	32.3	27.4	0.	1-2
3	-11.112	-20.188	228.26788	-53.7	10.6	-80.7	36.0	2.19330	0.858	-88.4	68.0	40.8	30.9	26.2	5.79910	2-3
4	-11.089	-19.855	232.72141	-56.1	11.3	-80.6	35.5	2.23600	0.839	-88.3	68.3	38.6	32.9	28.8	9.91643	3-4
5	-11.258	-19.817	234.55577	-54.4	11.4	-81.2	35.8	2.25370	0.832	-89.7	68.4	38.6	33.7	28.6	5.22627	4-5
6	-11.272	-20.155	229.96399	-52.0	10.8	-81.3	36.3	2.20951	0.851	-89.8	68.1	40.8	31.7	26.0	10.03796	5-6
7	-11.112	-20.188	228.26788	-53.7	10.6	-80.7	36.0	2.19330	0.858	-88.4	68.0	40.8	30.9	26.2	4.92426	6-7

JULY 31, 1964 13 HR 24 MIN 24 SEC 417 MS TAB NO 106 ATLAS PHOTO NO 106 POD SEQUENCE NO 879

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				84.382				195.62065	-9.426	-23.217	1931.076	2.503	-65.868	115.227		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.172	-20.016	226.87758	-54.1	11.0	-81.0	35.9	2.18045	0.845	-89.0	68.2	39.7	32.3	27.4	0.	1-2
3	-11.104	-20.194	223.92606	-53.7	10.6	-80.7	36.0	2.15158	0.859	-88.4	68.0	40.8	30.9	26.2	5.68816	2-3
4	-11.081	-19.868	228.29287	-56.1	11.2	-80.6	35.5	2.19345	0.840	-88.3	68.3	38.6	32.9	28.7	9.72687	3-4
5	-11.247	-19.831	230.09124	-54.4	11.4	-81.2	35.8	2.21080	0.832	-89.7	68.4	38.6	33.7	28.6	5.12643	4-5
6	-11.260	-20.162	225.58902	-52.0	10.8	-81.3	36.3	2.16747	0.851	-89.8	68.1	40.8	31.7	26.0	9.84595	5-6
7	-11.104	-20.194	223.92606	-53.7	10.6	-80.7	36.0	2.15158	0.859	-88.4	68.0	40.8	30.9	26.2	4.83029	6-7

JULY 31, 1964 13 HR 24 MIN 26 SEC 97 MS TAB NO 107 ATLAS PHOTO NO 107 POD SEQUENCE NO 881

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				82.702				191.78180	-9.447	-23.165	1927.237	2.505	-65.837	115.218		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.162	-20.025	222.47285	-54.1	11.0	-81.0	35.9	2.13811	0.846	-89.0	68.2	39.7	32.3	27.4	0.	1-2
3	-11.096	-20.200	219.57984	-53.7	10.6	-80.7	36.0	2.10982	0.859	-88.4	68.0	40.8	30.9	26.2	5.57711	2-3
4	-11.073	-19.880	223.85990	-56.1	11.2	-80.6	35.5	2.15085	0.840	-88.3	68.3	38.6	32.9	28.7	9.53716	3-4
5	-11.235	-19.844	225.62231	-54.4	11.4	-81.2	35.8	2.16786	0.832	-89.7	68.4	38.6	33.7	28.5	5.02657	4-5
6	-11.249	-20.169	221.20967	-52.0	10.8	-81.3	36.3	2.12540	0.851	-89.8	68.1	40.8	31.7	26.0	9.65376	5-6
7	-11.096	-20.200	219.57984	-53.7	10.6	-80.7	36.0	2.10982	0.859	-88.4	68.0	40.8	30.9	26.2	4.73622	6-7

JULY 31, 1964 13 HR 24 MIN 27 SEC 777 MS TAB NO 108 ATLAS PHOTO NO 108 POD SEQUENCE NO 883

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				81.022				187.94087	-9.469	-23.118	1923.396	2.507	-65.806	115.210		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.153	-20.035	218.06396	-54.1	11.0	-81.0	35.9	2.09574	0.846	-89.0	68.2	39.7	32.3	27.4	0.	1-2
3	-11.087	-20.207	215.22952	-53.7	10.6	-80.7	36.0	2.06802	0.859	-88.4	68.0	40.8	30.9	26.2	5.46597	2-3
4	-11.065	-19.893	219.42279	-56.1	11.2	-80.6	35.5	2.10822	0.840	-88.3	68.3	38.6	32.9	28.7	9.34727	3-4
5	-11.224	-19.858	221.14925	-54.4	11.4	-81.2	35.8	2.12489	0.832	-89.7	68.4	38.6	33.7	28.5	4.92663	4-5
6	-11.238	-20.176	216.82621	-52.0	10.8	-81.3	36.3	2.08328	0.851	-89.8	68.0	40.8	31.7	26.0	9.46144	5-6
7	-11.087	-20.207	215.22952	-53.7	10.6	-80.7	36.0	2.06802	0.859	-88.4	68.0	40.8	30.9	26.2	4.66215	6-7

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JULY 31, 1964 13 HR 24 MIN 29 SEC 457 MS

TAB NO 109 ATLAS PHOTO NO 109 POD SEQUENCE NO 885

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				79.342	184.09781	-9.491	-23.071	1919.553	2.509	-65.775	115.202		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.143	-20.045	213.64964	-54.1	11.0	-81.0	35.9	2.05332	0.846	-89.0	68.2 39.7 32.2 27.3	0.	1- 2
3	-11.079	-20.213	210.87386	-53.8	10.6	-80.7	36.0	2.02617	0.859	-88.4	68.0 40.8 30.8 26.2	5.35467	2- 3
4	-11.057	-19.906	214.98023	-56.1	11.2	-80.6	35.5	2.06554	0.840	-88.3	68.3 38.6 32.9 28.7	9.15716	3- 4
5	-11.213	-19.872	216.67067	-54.4	11.4	-81.2	35.8	2.08185	0.833	-89.7	68.3 38.6 33.7 28.5	4.82646	4- 5
6	-11.226	-20.183	212.43738	-52.0	10.8	-81.3	36.3	2.04111	0.852	-89.8	68.0 40.8 31.6 26.0	9.22688	5- 6
7	-11.079	-20.213	210.87386	-53.8	10.6	-80.7	36.0	2.02617	0.859	-88.4	68.0 40.8 30.8 26.2	4.54796	6- 7

JULY 31, 1964 13 HR 24 MIN 31 SEC 137 MS

TAB NO 110 ATLAS PHOTO NO 110 POD SEQUENCE NO 887

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				77.662	180.25256	-9.513	-23.023	1915.708	2.511	-65.744	115.193		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.133	-20.056	209.22931	-54.1	11.0	-81.0	35.9	2.01084	0.846	-89.0	68.2 39.7 32.2 27.3	0.	1- 2
3	-11.070	-20.220	206.51227	-53.8	10.6	-80.7	36.0	1.98426	0.859	-88.4	68.0 40.8 30.8 26.2	5.24318	2- 3
4	-11.049	-19.919	210.53158	-56.1	11.2	-80.6	35.5	2.02280	0.840	-88.3	68.3 38.6 32.9 28.7	8.96676	3- 4
5	-11.202	-19.885	212.18595	-54.4	11.4	-81.2	35.8	2.03876	0.833	-89.7	68.3 38.6 33.6 28.5	4.72609	4- 5
6	-11.214	-20.191	208.04256	-52.0	10.8	-81.3	36.3	1.99889	0.852	-89.8	68.0 40.8 31.6 26.0	9.07602	5- 6
7	-11.070	-20.220	206.51227	-53.8	10.6	-80.7	36.0	1.98426	0.859	-88.4	68.0 40.8 30.8 26.2	4.45347	6- 7

JULY 31, 1964 13 HR 24 MIN 32 SEC 817 MS

TAB NO 111 ATLAS PHOTO NO 111 POD SEQUENCE NO 889

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				75.982	176.40512	-9.535	-22.976	1911.860	2.513	-65.713	115.185		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.123	-20.066	204.80475	-54.1	11.0	-81.0	35.9	1.96831	0.846	-89.0	68.1 39.7 32.2 27.3	0.	1- 2
3	-11.062	-20.227	202.14648	-53.8	10.6	-80.7	36.0	1.94231	0.859	-88.4	68.0 40.8 30.8 26.1	5.13165	2- 3
4	-11.041	-19.932	206.07871	-56.1	11.2	-80.6	35.5	1.98001	0.840	-88.3	68.3 38.6 32.8 28.7	8.77622	3- 4
5	-11.190	-19.899	207.69702	-54.4	11.4	-81.2	35.8	1.99563	0.833	-89.7	68.3 38.6 33.6 28.5	4.62581	4- 5
6	-11.203	-20.198	203.64353	-52.0	10.7	-81.3	36.3	1.95662	0.852	-89.8	68.0 40.8 31.6 26.0	8.88301	5- 6
7	-11.062	-20.227	202.14648	-53.8	10.6	-80.7	36.0	1.94231	0.859	-88.4	68.0 40.8 30.8 26.1	4.35908	6- 7

JULY 31, 1964 13 HR 24 MIN 34 SEC 497 MS

TAB NO 112 ATLAS PHOTO NO 112 POD SEQUENCE NO 891

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				74.303	172.55559	-9.558	-22.928	1908.011	2.515	-65.681	115.176		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.113	-20.076	200.37610	-54.1	11.0	-81.0	35.9	1.92575	0.846	-89.0	68.1 39.7 32.2 27.3	0.	1- 2
3	-11.053	-20.234	197.77661	-53.8	10.6	-80.7	36.0	1.90032	0.859	-88.4	68.0 40.8 30.8 26.1	5.02003	2- 3
4	-11.033	-19.946	201.62179	-56.1	11.2	-80.6	35.5	1.93719	0.840	-88.3	68.3 38.6 32.8 28.7	8.58556	3- 4
5	-11.179	-19.913	203.26404	-54.4	11.4	-81.2	35.8	1.95246	0.833	-89.7	68.3 38.6 33.6 28.5	4.52544	4- 5
6	-11.191	-20.206	199.24042	-52.0	10.7	-81.3	36.3	1.91431	0.852	-89.8	68.0 40.8 31.6 26.0	8.68990	5- 6
7	-11.053	-20.234	197.77661	-53.8	10.6	-80.7	36.0	1.90032	0.859	-88.4	68.0 40.8 30.8 26.1	4.26448	6- 7

JULY 31, 1964 13 HR 24 MIN 36 SEC 177 MS

TAB NO 113 ATLAS PHOTO NO 113 POD SEQUENCE NO 893

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				72.623	168.70351	-9.580	-22.880	1904.159	2.518	-65.650	115.168		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.103	-20.087	195.94278	-54.1	11.0	-81.0	35.9	1.88314	0.846	-89.0	68.1 39.7 32.2 27.3	0.	1- 2
3	-11.044	-20.241	193.40207	-53.8	10.6	-80.7	35.9	1.85829	0.859	-88.4	68.0 40.8 30.8 26.1	4.90834	2- 3
4	-11.025	-19.959	197.16017	-56.1	11.2	-80.6	35.5	1.89432	0.841	-88.3	68.2 38.6 32.8 28.6	8.39473	3- 4
5	-11.167	-19.927	198.70638	-54.4	11.4	-81.2	35.8	1.90925	0.833	-89.7	68.3 38.6 33.6 28.4	4.42487	4- 5
6	-11.179	-20.213	194.83265	-52.1	10.7	-81.3	36.3	1.87196	0.852	-89.7	68.0 40.8 31.6 25.9	8.49663	5- 6
7	-11.044	-20.241	193.40207	-53.8	10.6	-80.7	35.9	1.85829	0.859	-88.4	68.0 40.8 30.8 26.1	4.16987	6- 7

JULY 31, 1964 13 HR 24 MIN 37 SEC 857 MS

TAB NO 114 ATLAS PHOTO NO 114 POD SEQUENCE NO 895

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				70.943	164.84953	-9.602	-22.832	1900.305	2.520	-65.618	115.159		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.093	-20.097	191.50562	-54.1	11.0	-81.0	35.9	1.84050	0.847	-89.0	68.1 39.7 32.2 27.3	0.	1- 2
3	-11.036	-20.248	189.02369	-53.8	10.6	-80.7	35.9	1.81622	0.859	-88.4	68.0 40.8 30.8 26.1	4.79653	2- 3
4	-11.016	-19.972	192.69472	-56.1	11.2	-80.6	35.5	1.85142	0.841	-88.3	68.2 38.6 32.8 28.6	8.20376	3- 4
5	-11.156	-19.941	194.20489	-54.4	11.4	-81.2	35.8	1.86599	0.833	-89.7	68.3 38.6 33.6 28.4	4.32429	4- 5
6	-11.167	-20.221	190.42102	-52.1	10.7	-81.3	36.3	1.82958	0.852	-89.7	68.0 40.8 31.6 25.9	8.30320	5- 6
7	-11.036	-20.248	189.02369	-53.8	10.6	-80.7	35.9	1.81622	0.859	-88.4	68.0 40.8 30.8 26.1	4.07517	6- 7

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JULY 31, 1964 13 HR 24 MIN 39 SEC 537 MS

TAB NO 115

ATLAS PHOTO NO 115

POD SEQUENCE NO 897

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.083	-20.108	187.06403	-54.1	11.0	-81.0	35.9	1.79781	0.847	-89.0	68.1	39.7	32.2	27.3	0.	1-2
3	-11.027	-20.255	184.64088	-53.8	10.6	-80.7	35.9	1.77411	0.859	-88.4	68.0	40.8	30.8	26.1	4.68469	2-3
4	-11.008	-19.986	188.22486	-56.1	11.2	-80.6	35.5	1.80847	0.841	-88.3	68.2	38.6	32.8	28.6	8.01261	3-4
5	-11.144	-19.956	189.69899	-54.4	11.3	-81.2	35.8	1.82270	0.834	-89.7	68.3	38.6	33.5	28.4	4.22353	4-5
6	-11.156	-20.228	184.64088	-53.8	10.7	-81.3	36.3	1.78715	0.852	-89.7	68.0	40.8	31.5	25.9	8.10966	5-6
7	-11.027	-20.255	184.64088	-53.8	10.6	-80.7	35.9	1.77411	0.859	-88.4	68.0	40.8	30.8	26.1	3.98037	6-7

JULY 31, 1964 13 HR 24 MIN 41 SEC 216 MS

TAB NO 116

ATLAS PHOTO NO 116

POD SEQUENCE NO 899

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.073	-20.118	182.61831	-54.1	11.0	-81.0	35.9	1.75509	0.847	-89.0	68.1	39.7	32.1	27.3	0.	1-2
3	-11.018	-20.262	180.25396	-53.8	10.6	-80.7	35.9	1.73196	0.859	-88.4	67.9	40.8	30.8	26.1	4.57271	2-3
4	-11.000	-19.999	183.75087	-56.1	11.2	-80.6	35.5	1.76549	0.841	-88.3	68.2	38.6	32.8	28.6	7.82136	3-4
5	-11.133	-19.970	185.18900	-54.4	11.3	-81.2	35.8	1.77937	0.834	-89.7	68.2	38.6	33.5	28.4	4.12285	4-5
6	-11.144	-20.236	181.58485	-52.1	10.7	-81.3	36.3	1.74468	0.852	-89.7	68.0	40.8	31.5	25.9	7.91596	5-6
7	-11.018	-20.262	180.25396	-53.8	10.6	-80.7	35.9	1.73196	0.859	-88.4	67.9	40.8	30.8	26.1	3.88546	6-7

JULY 31, 1964 13 HR 24 MIN 42 SEC 896 MS

TAB NO 117

ATLAS PHOTO NO 117

POD SEQUENCE NO 901

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.063	-20.129	178.16820	-54.1	11.0	-81.0	35.9	1.71232	0.847	-89.0	68.1	39.7	32.1	27.2	0.	1-2
3	-11.009	-20.269	175.86263	-53.8	10.6	-80.7	35.9	1.68976	0.860	-88.4	67.9	40.8	30.8	26.1	4.46070	2-3
4	-10.991	-20.013	179.27247	-56.1	11.2	-80.6	35.5	1.72246	0.841	-88.3	68.2	38.6	32.7	28.6	7.62996	3-4
5	-11.121	-19.984	180.67460	-54.4	11.3	-81.2	35.8	1.73599	0.834	-89.7	68.2	38.6	33.5	28.4	4.02208	4-5
6	-11.132	-20.244	177.16031	-52.1	10.7	-81.3	36.2	1.70217	0.853	-89.7	68.0	40.8	31.5	25.9	7.72211	5-6
7	-11.009	-20.269	175.86263	-53.8	10.6	-80.7	35.9	1.68976	0.860	-88.4	67.9	40.8	30.8	26.1	3.79056	6-7

JULY 31, 1964 13 HR 24 MIN 44 SEC 576 MS

TAB NO 118

ATLAS PHOTO NO 118

POD SEQUENCE NO 903

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.052	-20.139	173.71583	-54.1	11.0	-81.0	35.9	1.66953	0.847	-89.0	68.1	39.7	32.1	27.2	0.	1-2
3	-11.000	-20.276	171.46891	-53.8	10.6	-80.7	35.9	1.64755	0.860	-88.4	67.9	40.8	30.7	26.1	4.34874	2-3
4	-10.983	-20.026	174.79194	-56.1	11.2	-80.6	35.5	1.67941	0.841	-88.3	68.2	38.6	32.7	28.6	7.43856	3-4
5	-11.109	-19.998	176.15812	-54.4	11.3	-81.2	35.8	1.69259	0.834	-89.7	68.2	38.6	33.5	28.4	3.92122	4-5
6	-11.120	-20.251	172.73243	-52.1	10.7	-81.3	36.2	1.65963	0.853	-89.7	68.0	40.8	31.5	25.9	7.52831	5-6
7	-11.000	-20.276	171.46891	-53.8	10.6	-80.7	35.9	1.64755	0.860	-88.4	67.9	40.8	30.7	26.1	3.69567	6-7

JULY 31, 1964 13 HR 24 MIN 46 SEC 256 MS

TAB NO 119

ATLAS PHOTO NO 119

POD SEQUENCE NO 905

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.042	-20.150	169.26158	-54.1	11.0	-81.0	35.9	1.62672	0.847	-89.0	68.1	39.7	32.1	27.2	0.	1-2
3	-10.991	-20.282	167.07315	-53.8	10.6	-80.7	35.9	1.60531	0.860	-88.4	67.9	40.8	30.7	26.1	4.23674	2-3
4	-10.974	-20.039	170.30962	-56.1	11.2	-80.6	35.5	1.63634	0.842	-88.2	68.2	38.6	32.7	28.5	7.24723	3-4
5	-11.098	-20.012	171.63993	-54.4	11.3	-81.2	35.8	1.64918	0.834	-89.7	68.2	38.6	33.5	28.4	3.82038	4-5
6	-11.108	-20.259	168.30457	-52.1	10.7	-81.3	36.2	1.61708	0.853	-89.7	68.0	40.8	31.5	25.9	7.33455	5-6
7	-10.991	-20.282	167.07315	-53.8	10.6	-80.7	35.9	1.60531	0.860	-88.4	67.9	40.8	30.7	26.1	3.60068	6-7

JULY 31, 1964 13 HR 24 MIN 47 SEC 936 MS

TAB NO 120

ATLAS PHOTO NO 120

POD SEQUENCE NO 907

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ						
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.032	-20.160	164.80261	-54.1	10.9	-81.0	35.9	1.58386	0.847	-89.0	68.0	39.7	32.1	27.2	0.	1-2
3	-10.983	-20.289	162.67271	-53.8	10.6	-80.7	35.9	1.56303	0.860	-88.4	67.9	40.8	30.7	26.1	4.12470	2-3
4	-10.966	-20.053	165.82257	-56.1	11.2	-80.6	35.5	1.59323	0.842	-88.2	68.1	38.6	32.7	28.5	7.05574	3-4
5	-11.086	-20.026	167.11705	-54.4	11.3	-81.2	35.8	1.60572	0.834	-89.7	68.2	38.6	33.5	28.3	3.71945	4-5
6	-11.096	-20.266	163.87102	-52.1	10.7	-81.3	36.2	1.57448	0.853	-89.7	67.9	40.8	31.5	25.9	7.14066	5-6
7	-10.983	-20.289	162.67271	-53.8	10.6	-80.7	35.9	1.56303	0.860	-88.4	67.9	40.8	30.7	26.1	3.50551	6-7

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JULY 31, 1964 13 HR 24 MIN 49 SEC 616 MS TAB NO 121 ATLAS PHOTO NO 121 POD SEQUENCE NO 909

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		59.183	137.80898	-9.761	-22.488	1873.264	2.534	-65.393	115.097							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.022	-20.171	160.33906	-54.1	10.9	-81.0	35.9	1.54097	0.847	-89.0	68.0	39.7	32.1	27.2	0.	1-2
3	-10.974	-20.296	158.26770	-53.8	10.6	-80.7	35.9	1.52070	0.860	-88.4	67.9	40.8	30.7	26.1	4.01257	2-3
4	-10.957	-20.066	161.33096	-56.1	11.2	-80.6	35.5	1.55007	0.842	-88.2	68.1	38.6	32.7	28.5	6.86405	3-4
5	-11.074	-20.040	162.58955	-54.4	11.3	-81.2	35.8	1.56222	0.835	-89.7	68.2	38.6	33.4	28.3	3.61831	4-5
6	-11.084	-20.274	159.43290	-52.1	10.7	-81.3	36.2	1.53184	0.853	-89.7	67.9	40.8	31.5	25.9	6.98659	5-6
7	-10.974	-20.296	158.26770	-53.8	10.6	-80.7	35.9	1.52070	0.860	-88.4	67.9	40.8	30.7	26.1	3.41042	6-7

JULY 31, 1964 13 HR 24 MIN 51 SEC 296 MS TAB NO 122 ATLAS PHOTO NO 122 POD SEQUENCE NO 911

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		57.504	133.93695	-9.784	-22.438	1869.392	2.536	-65.360	115.088							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.011	-20.181	155.87076	-54.1	10.9	-81.0	35.9	1.49802	0.848	-89.0	68.0	39.7	32.1	27.2	0.	1-2
3	-10.965	-20.303	153.85794	-53.8	10.6	-80.7	35.9	1.47833	0.860	-88.4	67.9	40.8	30.7	26.1	3.90031	2-3
4	-10.949	-20.080	156.83455	-56.1	11.2	-80.6	35.5	1.50887	0.842	-88.2	68.1	38.6	32.7	28.5	6.67221	3-4
5	-11.062	-20.055	158.05732	-54.4	11.3	-81.2	35.8	1.51867	0.835	-89.7	68.2	38.6	33.4	28.3	3.51737	4-5
6	-11.072	-20.282	154.99006	-52.1	10.7	-81.3	36.2	1.48915	0.853	-89.7	67.9	40.8	31.5	25.9	6.75232	5-6
7	-10.965	-20.303	153.85794	-53.8	10.6	-80.7	35.9	1.47833	0.860	-88.4	67.9	40.8	30.7	26.1	3.31523	6-7

JULY 31, 1964 13 HR 24 MIN 52 SEC 136 MS TAB NO 123 ATLAS PHOTO NO 123 POD SEQUENCE NO 912

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		56.664	132.00038	-9.796	-22.413	1867.456	2.538	-65.344	115.084							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.006	-20.186	153.63519	-54.1	10.9	-81.0	35.9	1.47654	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.960	-20.307	151.65165	-53.8	10.6	-80.7	35.9	1.45713	0.860	-88.4	67.9	40.8	30.7	26.1	3.84417	2-3
4	-10.944	-20.086	154.58495	-56.1	11.2	-80.6	35.5	1.48526	0.842	-88.2	68.1	38.6	32.7	28.5	6.57623	3-4
5	-11.056	-20.062	155.78979	-54.4	11.3	-81.2	35.8	1.49689	0.835	-89.7	68.1	38.6	33.4	28.3	3.46666	4-5
6	-11.066	-20.295	152.76722	-52.1	10.7	-81.3	36.2	1.46780	0.853	-89.7	67.9	40.8	31.5	25.9	6.65516	5-6
7	-10.960	-20.307	151.65165	-53.8	10.6	-80.7	35.9	1.45713	0.860	-88.4	67.9	40.8	30.7	26.1	3.26764	6-7

JULY 31, 1964 13 HR 24 MIN 52 SEC 976 MS TAB NO 124 ATLAS PHOTO NO 124 POD SEQUENCE NO 913

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		55.824	130.06297	-9.807	-22.388	1865.518	2.539	-65.327	115.079							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.001	-20.192	151.39814	-54.2	10.9	-81.0	35.8	1.45504	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.955	-20.311	149.44391	-53.8	10.6	-80.7	35.9	1.43592	0.860	-88.4	67.9	40.8	30.7	26.1	3.78797	2-3
4	-10.940	-20.093	152.33386	-56.1	11.2	-80.6	35.5	1.46363	0.842	-88.2	68.1	38.6	32.7	28.5	6.48019	3-4
5	-11.050	-20.069	153.52078	-54.4	11.3	-81.2	35.8	1.47509	0.835	-89.7	68.1	38.6	33.4	28.3	3.41604	4-5
6	-11.060	-20.289	150.25290	-52.1	10.7	-81.3	36.2	1.44643	0.853	-89.7	67.9	40.8	31.5	25.9	6.55794	5-6
7	-10.955	-20.311	149.44391	-53.8	10.6	-80.7	35.9	1.43592	0.860	-88.4	67.9	40.8	30.7	26.1	3.21983	6-7

JULY 31, 1964 13 HR 24 MIN 53 SEC 816 MS TAB NO 125 ATLAS PHOTO NO 125 POD SEQUENCE NO 914

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		54.984	128.12514	-9.819	-22.363	1863.580	2.540	-65.311	115.075							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.996	-20.197	149.16010	-54.2	10.9	-81.0	35.8	1.43353	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.951	-20.314	147.23517	-53.8	10.6	-80.7	35.9	1.41470	0.860	-88.4	67.9	40.8	30.7	26.0	3.73175	2-3
4	-10.936	-20.100	150.08177	-56.1	11.2	-80.6	35.5	1.44199	0.842	-88.2	68.1	38.6	32.7	28.5	6.38414	3-4
5	-11.044	-20.076	151.25077	-54.4	11.3	-81.2	35.8	1.45327	0.835	-89.7	68.1	38.6	33.4	28.3	3.36541	4-5
6	-11.054	-20.293	148.31762	-52.1	10.7	-81.3	36.2	1.42505	0.853	-89.7	67.9	40.8	31.5	25.9	6.46068	5-6
7	-10.951	-20.314	147.23517	-53.8	10.6	-80.7	35.9	1.41470	0.860	-88.4	67.9	40.8	30.7	26.0	3.17214	6-7

JULY 31, 1964 13 HR 24 MIN 54 SEC 656 MS TAB NO 126 ATLAS PHOTO NO 126 POD SEQUENCE NO 915

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		54.144	126.18643	-9.830	-22.338	1861.642	2.541	-65.295	115.070							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.990	-20.203	146.92055	-54.2	10.9	-80.9	35.8	1.41201	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.946	-20.318	145.02489	-53.8	10.6	-80.7	35.9	1.39346	0.860	-88.4	67.9	40.8	30.7	26.0	3.67556	2-3
4	-10.931	-20.107	147.82815	-56.1	11.2	-80.6	35.5	1.42034	0.842	-88.2	68.1	38.6	32.6	28.5	6.28802	3-4
5	-11.038	-20.083	148.97923	-54.4	11.3	-81.2	35.8	1.43145	0.835	-89.7	68.1	38.6	33.4	28.3	3.31479	4-5
6	-11.048	-20.297	146.09079	-52.1	10.7	-81.3	36.2	1.40365	0.853	-89.7	67.9	40.8	31.5	25.9	6.36335	5-6
7	-10.946	-20.318	145.02489	-53.8	10.6	-80.7	35.9	1.39346	0.860	-88.4	67.9	40.8	30.7	26.0	3.12445	6-7

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JULY 31, 1964 13 HR 24 MIN 55 SEC 496 MS TAB NO 127 ATLAS PHOTO NO 127 POD SEQUENCE NO 916

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		53.304	124.24750	-9.842	-22.312	1859.703	2.542	-65.278	115.066							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.985	-20.208	144.68018	-54.2	10.9	-80.9	35.8	1.39047	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.942	-20.321	142.81383	-53.8	10.6	-80.7	35.9	1.37222	0.860	-88.4	67.9	40.8	30.7	26.0	3.61932	2-3
4	-10.927	-20.114	145.57375	-56.1	11.2	-80.6	35.5	1.39868	0.842	-88.2	68.1	38.6	32.6	28.5	6.19185	3-4
5	-11.032	-20.091	146.70691	-54.4	11.3	-81.2	35.8	1.40962	0.835	-89.7	68.1	38.6	33.4	28.3	3.26407	4-5
6	-11.041	-20.301	143.86318	-52.1	10.7	-81.3	36.2	1.38225	0.853	-89.7	67.9	40.8	31.4	25.9	6.26601	5-6
7	-10.942	-20.321	142.81383	-53.8	10.6	-80.7	35.9	1.37222	0.860	-88.4	67.9	40.8	30.7	26.0	3.07675	6-7

JULY 31, 1964 13 HR 24 MIN 56 SEC 336 MS TAB NO 128 ATLAS PHOTO NO 128 POD SEQUENCE NO 917

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		52.464	122.30771	-9.854	-22.287	1857.763	2.543	-65.262	115.061							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.980	-20.213	142.43834	-54.2	10.9	-80.9	35.8	1.36893	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.937	-20.325	140.60129	-53.8	10.6	-80.7	35.9	1.35096	0.860	-88.4	67.9	40.8	30.7	26.0	3.56303	2-3
4	-10.923	-20.121	143.31784	-56.1	11.2	-80.6	35.5	1.37700	0.842	-88.2	68.1	38.6	32.6	28.5	4.09566	3-4
5	-11.026	-20.098	144.43307	-54.4	11.3	-81.2	35.8	1.38777	0.835	-89.7	68.1	38.6	33.4	28.3	3.21335	4-5
6	-11.035	-20.305	141.63406	-52.2	10.7	-81.3	36.2	1.36083	0.853	-89.7	67.9	40.8	31.4	25.9	6.16862	5-6
7	-10.937	-20.325	140.60129	-53.8	10.6	-80.7	35.9	1.35096	0.860	-88.4	67.9	40.8	30.7	26.0	3.02885	6-7

JULY 31, 1964 13 HR 24 MIN 57 SEC 175 MS TAB NO 129 ATLAS PHOTO NO 129 POD SEQUENCE NO 918

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		51.624	120.36766	-9.865	-22.262	1855.823	2.544	-65.245	115.056							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.975	-20.219	140.19567	-54.2	10.9	-80.9	35.8	1.34738	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.933	-20.329	138.38794	-53.8	10.6	-80.7	35.9	1.32969	0.860	-88.4	67.9	40.8	30.7	26.0	3.50874	2-3
4	-10.918	-20.127	141.06113	-56.1	11.2	-80.6	35.5	1.35532	0.842	-88.2	68.1	38.6	32.6	28.5	5.99942	3-4
5	-11.020	-20.105	142.15845	-54.4	11.3	-81.2	35.8	1.36591	0.835	-89.7	68.1	38.6	33.4	28.3	3.16263	4-5
6	-11.029	-20.309	139.40417	-52.2	10.7	-81.3	36.2	1.33940	0.853	-89.7	67.9	40.8	31.4	25.8	6.07118	5-6
7	-10.933	-20.329	138.38794	-53.8	10.6	-80.7	35.9	1.32969	0.860	-88.4	67.9	40.8	30.7	26.0	2.98115	6-7

JULY 31, 1964 13 HR 24 MIN 58 SEC 15 MS TAB NO 130 ATLAS PHOTO NO 130 POD SEQUENCE NO 919

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		50.784	118.42683	-9.877	-22.236	1853.882	2.545	-65.228	115.052							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.969	-20.224	137.95159	-54.2	10.9	-80.9	35.8	1.32581	0.848	-89.0	68.0	39.7	32.0	27.2	0.	1-2
3	-10.923	-20.332	136.17318	-53.8	10.6	-80.7	35.9	1.30841	0.860	-88.4	67.9	40.8	30.7	26.0	3.45041	2-3
4	-10.928	-20.332	136.17318	-53.8	10.6	-80.7	35.9	1.33363	0.843	-88.2	68.1	38.6	32.6	28.5	5.90314	3-4
5	-11.014	-20.134	138.80298	-56.1	11.2	-80.6	35.5	1.34404	0.835	-89.7	68.1	38.6	33.4	28.3	3.11191	4-5
6	-11.023	-20.313	137.17286	-52.2	10.7	-81.3	36.2	1.31797	0.853	-89.7	67.9	40.8	31.4	25.8	5.97370	5-6
7	-10.928	-20.332	136.17318	-53.8	10.6	-80.7	35.9	1.30841	0.860	-88.4	67.9	40.8	30.7	26.0	2.93335	6-7

JULY 31, 1964 13 HR 24 MIN 58 SEC 855 MS TAB NO 131 ATLAS PHOTO NO 131 POD SEQUENCE NO 920

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		49.944	116.48558	-9.889	-22.211	1851.941	2.546	-65.212	115.047							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.964	-20.230	135.70650	-54.2	10.9	-80.9	35.8	1.30423	0.848	-89.0	68.0	39.7	32.0	27.1	0.	1-2
3	-10.923	-20.336	133.95743	-53.8	10.6	-80.7	35.9	1.28712	0.860	-88.4	67.9	40.8	30.7	26.0	3.39404	2-3
4	-10.910	-20.141	136.56388	-56.1	11.2	-80.6	35.5	1.31192	0.843	-88.2	68.1	38.6	32.6	28.4	5.80682	3-4
5	-11.008	-20.120	137.60537	-54.4	11.3	-81.2	35.8	1.32216	0.835	-89.7	68.1	38.6	33.4	28.2	3.06108	4-5
6	-11.017	-20.317	134.94055	-52.2	10.7	-81.3	36.2	1.29652	0.854	-89.7	67.9	40.8	31.4	25.8	5.87619	5-6
7	-10.923	-20.336	133.95743	-53.8	10.6	-80.7	35.9	1.28712	0.860	-88.4	67.9	40.8	30.7	26.0	2.88545	6-7

JULY 31, 1964 13 HR 24 MIN 59 SEC 695 MS TAB NO 132 ATLAS PHOTO NO 132 POD SEQUENCE NO 921

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		49.104	114.54347	-9.901	-22.185	1849.999	2.547	-65.195	115.042							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.959	-20.235	133.46032	-54.2	10.9	-80.9	35.8	1.28264	0.848	-89.0	68.0	39.7	32.0	27.1	0.	1-2
3	-10.919	-20.340	131.74053	-53.8	10.6	-80.7	35.9	1.26582	0.860	-88.4	67.9	40.8	30.7	26.0	3.33771	2-3
4	-10.905	-20.148	134.28364	-56.1	11.2	-80.6	35.5	1.29020	0.843	-88.2	68.0	38.6	32.6	28.4	5.71047	3-4
5	-11.002	-20.127	135.32724	-54.4	11.3	-81.2	35.8	1.30028	0.836	-89.7	68.1	38.6	33.3	28.2	3.01036	4-5
6	-11.011	-20.321	132.70710	-52.2	10.7	-81.3	36.2	1.27506	0.854	-89.7	67.9	40.8	31.4	25.8	5.77864	5-6
7	-10.919	-20.340	131.74053	-53.8	10.6	-80.7	35.9	1.26582	0.860	-88.4	67.9	40.8	30.7	26.0	2.83765	6-7

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TAB NO 133 ATLAS PHOTO NO 133 POD SEQUENCE NO 922
 JULY 31, 1964 13 HR 25 MIN 0 SEC 535 MS

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
 46.264 112.60136 -9.912 -22.160 1848.057 2.548 -65.178 115.038

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.953	-20.241	131.21362	-54.2	10.9	-80.9	35.8	1.26105	0.848	-89.0	68.0	39.7	32.0	27.1	0.	1-2
3	-10.914	-20.343	129.52312	-53.8	10.6	-80.7	35.9	1.24451	0.860	-88.4	67.9	40.8	30.7	26.0	3.28137	2-3
4	-10.901	-20.155	132.02291	-56.1	11.2	-80.6	35.5	1.26848	0.843	-88.2	68.0	38.6	32.6	28.4	5.61411	3-4
5	-10.996	-20.134	133.04859	-54.4	11.3	-81.2	35.8	1.27838	0.836	-89.7	68.1	38.6	33.3	28.2	2.95954	4-5
6	-11.005	-20.325	130.47314	-52.2	10.7	-81.3	36.1	1.25360	0.854	-89.7	67.9	40.8	31.4	25.8	5.68111	5-6
7	-10.914	-20.343	129.52312	-53.8	10.6	-80.7	35.9	1.24451	0.860	-88.4	67.9	40.8	30.7	26.0	2.78975	6-7

TAB NO 134 ATLAS PHOTO NO 134 POD SEQUENCE NO 923
 JULY 31, 1964 13 HR 25 MIN 1 SEC 375 MS

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
 47.424 110.65797 -9.924 -22.134 1846.113 2.549 -65.162 115.033

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.948	-20.246	128.96489	-54.2	10.9	-80.9	35.8	1.23944	0.848	-89.0	68.0	39.7	32.0	27.1	0.	1-2
3	-10.910	-20.347	127.30369	-53.8	10.6	-80.7	35.9	1.22319	0.860	-88.4	67.9	40.8	30.7	26.0	3.22496	2-3
4	-10.896	-20.162	129.76014	-56.1	11.2	-80.6	35.5	1.24674	0.843	-88.2	68.0	38.6	32.6	28.4	5.51766	3-4
5	-10.990	-20.142	130.76791	-54.4	11.3	-81.2	35.8	1.25647	0.836	-89.7	68.1	38.6	33.3	28.2	2.90862	4-5
6	-10.998	-20.329	128.23718	-52.2	10.7	-81.3	36.1	1.23211	0.854	-89.7	67.9	40.8	31.4	25.8	5.58348	5-6
7	-10.910	-20.347	127.30369	-53.8	10.6	-80.7	35.9	1.22319	0.860	-88.4	67.9	40.8	30.7	26.0	2.74186	6-7

TAB NO 135 ATLAS PHOTO NO 135 POD SEQUENCE NO 924
 JULY 31, 1964 13 HR 25 MIN 2 SEC 215 MS

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
 46.584 108.71446 -9.936 -22.108 1844.170 2.551 -65.145 115.028

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.943	-20.252	126.71546	-54.2	10.9	-80.9	35.8	1.21762	0.848	-89.0	68.0	39.7	32.0	27.1	0.	1-2
3	-10.905	-20.351	125.08357	-53.8	10.6	-80.7	35.9	1.20166	0.861	-88.4	67.8	40.8	30.6	26.0	3.16852	2-3
4	-10.892	-20.169	127.49667	-56.1	11.2	-80.6	35.5	1.22499	0.843	-88.2	68.0	38.6	32.6	28.4	5.42121	3-4
5	-10.984	-20.149	128.48654	-54.4	11.3	-81.2	35.8	1.23455	0.836	-89.7	68.1	38.6	33.3	28.2	2.85780	4-5
6	-10.992	-20.333	126.00050	-52.2	10.7	-81.3	36.1	1.21062	0.854	-89.7	67.9	40.8	31.4	25.8	5.48582	5-6
7	-10.905	-20.351	125.08357	-53.8	10.6	-80.7	35.9	1.20166	0.861	-88.4	67.8	40.8	30.6	26.0	2.69395	6-7

TAB NO 136 ATLAS PHOTO NO 136 POD SEQUENCE NO 925
 JULY 31, 1964 13 HR 25 MIN 3 SEC 55 MS

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
 45.744 106.77016 -9.948 -22.082 1842.225 2.552 -65.128 115.024

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.937	-20.257	124.46458	-54.2	10.9	-80.9	35.8	1.19619	0.848	-89.0	67.9	39.7	32.0	27.1	0.	1-2
3	-10.900	-20.355	122.86201	-53.8	10.6	-80.7	35.9	1.18051	0.861	-88.4	67.8	40.8	30.6	26.0	3.11208	2-3
4	-10.888	-20.176	125.23172	-56.1	11.2	-80.6	35.5	1.20323	0.843	-88.2	68.0	38.6	32.6	28.4	5.32471	3-4
5	-10.978	-20.156	126.20371	-54.5	11.3	-81.2	35.8	1.21261	0.836	-89.7	68.0	38.6	33.3	28.2	2.80708	4-5
6	-10.986	-20.337	123.76240	-52.2	10.7	-81.3	36.1	1.18912	0.854	-89.7	67.9	40.8	31.4	25.8	5.38813	5-6
7	-10.900	-20.355	122.86201	-53.8	10.6	-80.7	35.9	1.18051	0.861	-88.4	67.8	40.8	30.6	26.0	2.64605	6-7

TAB NO 137 ATLAS PHOTO NO 137 POD SEQUENCE NO 926
 JULY 31, 1964 13 HR 25 MIN 3 SEC 895 MS

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
 44.904 104.82561 -9.960 -22.057 1840.281 2.553 -65.111 115.019

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.932	-20.263	122.21287	-54.2	10.9	-80.9	35.8	1.17455	0.848	-89.0	67.9	39.7	32.0	27.1	0.	1-2
3	-10.896	-20.358	120.63962	-53.8	10.6	-80.7	35.9	1.15916	0.861	-88.4	67.8	40.8	30.6	26.0	3.05561	2-3
4	-10.883	-20.183	122.96599	-56.1	11.2	-80.6	35.5	1.18146	0.843	-88.2	68.0	38.6	32.6	28.4	5.22815	3-4
5	-10.972	-20.164	123.92007	-54.5	11.3	-81.2	35.8	1.19067	0.836	-89.7	68.0	38.6	33.3	28.2	2.75606	4-5
6	-10.980	-20.341	121.52346	-52.2	10.7	-81.3	36.1	1.16761	0.854	-89.7	67.9	40.8	31.4	25.8	5.29041	5-6
7	-10.896	-20.358	120.63962	-53.8	10.6	-80.7	35.9	1.15916	0.861	-88.4	67.8	40.8	30.6	26.0	2.59805	6-7

TAB NO 138 ATLAS PHOTO NO 138 POD SEQUENCE NO 927
 JULY 31, 1964 13 HR 25 MIN 4 SEC 735 MS

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
 44.064 102.88014 -9.972 -22.031 1838.335 2.554 -65.094 115.014

PHOTO DATA

PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.927	-20.268	119.95955	-54.2	10.9	-80.9	35.8	1.15289	0.848	-89.0	67.9	39.7	32.0	27.1	0.	1-2
3	-10.891	-20.362	118.41563	-53.8	10.6	-80.7	35.9	1.13779	0.861	-88.4	67.8	40.8	30.6	26.0	2.99910	2-3
4	-10.879	-20.190	120.69863	-56.1	11.1	-80.6	35.5	1.15968	0.843	-88.2	68.0	38.6	32.6	28.4	5.13154	3-4
5	-10.966	-20.171	121.63481	-54.5	11.3	-81.2	35.8	1.16871	0.836	-89.7	68.0	38.6	33.3	28.2	2.70513	4-5
6	-10.974	-20.345	119.28292	-52.2	10.7	-81.3	36.1	1.14608	0.854	-89.7	67.9	40.8	31.4	25.8	5.19259	5-6
7	-10.891	-20.362	118.41563	-53.8	10.6	-80.7	35.9	1.13779	0.861	-88.4	67.8	40.8	30.6	26.0	2.55004	6-7

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JULY 31, 1964 13 HR 25 MIN. 5 SEC 575 MS TAB NO 139 ATLAS PHOTO NO 139 POD SEQUENCE NO 928

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
43.224 100.93437 -9.984 -22.005 1836.390 2.555 -65.078 115.009

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.921	-20.274	117.70535	-54.2	10.9	-80.9	35.8	1.13123	0.849	-89.0	67.9	39.7	31.9	27.1	0.	1-2
3	-10.886	-20.366	116.19074	-53.8	10.6	-80.7	35.9	1.11641	0.861	-88.4	67.8	40.8	30.6	26.0	2.94259	2-3
4	-10.874	-20.197	116.43037	-56.1	11.1	-80.6	35.5	1.13788	0.843	-88.2	68.0	38.6	32.5	28.4	5.03491	3-4
5	-10.960	-20.178	119.34866	-54.5	11.3	-81.2	35.8	1.14675	0.836	-89.7	68.0	38.6	33.3	28.2	2.65421	4-5
6	-10.967	-20.350	117.04150	-52.2	10.7	-81.3	36.1	1.12454	0.854	-88.7	67.9	40.8	31.4	25.8	5.03478	5-6
7	-10.886	-20.366	116.19074	-53.8	10.6	-80.7	35.9	1.11641	0.861	-88.4	67.8	40.8	30.6	26.0	2.50214	6-7

JULY 31, 1964 13 HR 25 MIN. 6 SEC 415 MS TAB NO 140 ATLAS PHOTO NO 140 POD SEQUENCE NO 929

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
42.384 98.98769 -9.996 -21.979 1834.443 2.556 -65.061 115.005

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.916	-20.279	115.44955	-54.2	10.9	-80.9	35.8	1.10955	0.849	-89.0	67.9	39.7	31.9	27.1	0.	1-2
3	-10.882	-20.370	113.96430	-53.8	10.6	-80.7	35.9	1.09502	0.861	-88.4	67.8	40.8	30.6	26.0	2.88604	2-3
4	-10.870	-20.204	116.16051	-56.1	11.1	-80.5	35.5	1.11608	0.843	-88.2	68.0	38.6	32.5	28.4	4.93820	3-4
5	-10.954	-20.186	117.06092	-54.5	11.3	-81.2	35.8	1.12477	0.836	-89.7	68.0	38.6	33.3	28.2	2.60319	4-5
6	-10.961	-20.354	114.79847	-52.2	10.7	-81.3	36.1	1.10299	0.854	-89.7	67.9	40.8	31.4	25.8	4.99691	5-6
7	-10.882	-20.370	113.96430	-53.8	10.6	-80.7	35.9	1.09502	0.861	-88.4	67.8	40.8	30.6	26.0	2.45403	6-7

JULY 31, 1964 13 HR 25 MIN. 7 SEC 255 MS TAB NO 141 ATLAS PHOTO NO 141 POD SEQUENCE NO 930

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
41.545 97.04076 -10.008 -21.953 1832.496 2.557 -65.044 115.000

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.911	-20.285	113.19291	-54.2	10.9	-80.9	35.8	1.08786	0.849	-89.0	67.9	39.7	31.9	27.1	0.	1-2
3	-10.877	-20.374	111.73697	-53.9	10.6	-80.7	35.9	1.07362	0.861	-88.4	67.8	40.8	30.6	26.0	2.82950	2-3
4	-10.865	-20.211	113.88984	-56.1	11.1	-80.5	35.5	1.09426	0.843	-88.2	68.0	38.6	32.5	28.4	4.84149	3-4
5	-10.948	-20.193	114.77234	-54.5	11.3	-81.2	35.8	1.10278	0.836	-89.7	68.0	38.6	33.3	28.2	2.55216	4-5
6	-10.955	-20.358	112.55464	-52.2	10.7	-81.3	36.1	1.08143	0.854	-89.7	67.8	40.8	31.4	25.8	4.89900	5-6
7	-10.877	-20.374	111.73697	-53.9	10.6	-80.7	35.9	1.07362	0.861	-88.4	67.8	40.8	30.6	26.0	2.40603	6-7

JULY 31, 1964 13 HR 25 MIN. 8 SEC 95 MS TAB NO 142 ATLAS PHOTO NO 142 POD SEQUENCE NO 931

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
40.705 95.09291 -10.020 -21.927 1830.548 2.558 -65.027 114.995

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.905	-20.291	110.93467	-54.2	10.9	-80.9	35.8	1.06616	0.849	-89.0	67.9	39.7	31.9	27.1	0.	1-2
3	-10.872	-20.378	109.50809	-53.9	10.6	-80.7	35.9	1.05220	0.861	-88.4	67.8	40.8	30.6	26.0	2.77290	2-3
4	-10.861	-20.218	111.61753	-56.1	11.1	-80.5	35.5	1.07243	0.843	-88.2	68.0	38.6	32.5	28.4	4.74469	3-4
5	-10.942	-20.201	112.48214	-54.5	11.2	-81.2	35.8	1.08077	0.836	-89.7	68.0	38.6	33.3	28.2	2.50114	4-5
6	-10.948	-20.362	110.30920	-52.2	10.7	-81.3	36.1	1.05986	0.854	-89.7	67.8	40.8	31.4	25.8	4.80103	5-6
7	-10.872	-20.378	109.50809	-53.9	10.6	-80.7	35.9	1.05220	0.861	-88.4	67.8	40.8	30.6	26.0	2.35802	6-7

JULY 31, 1964 13 HR 25 MIN. 8 SEC 935 MS TAB NO 143 ATLAS PHOTO NO 143 POD SEQUENCE NO 932

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
39.865 53.14476 -10.032 -21.901 1828.600 2.559 -65.010 114.990

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.900	-20.296	108.67550	-54.2	10.9	-80.9	35.8	1.04445	0.849	-89.0	67.9	39.7	31.9	27.1	0.	1-2
3	-10.867	-20.381	107.27827	-53.9	10.6	-80.7	35.9	1.03078	0.861	-88.4	67.8	40.8	30.6	26.0	2.71622	2-3
4	-10.856	-20.226	109.34433	-56.1	11.1	-80.5	35.5	1.05059	0.843	-88.2	68.0	38.6	32.5	28.4	4.64788	3-4
5	-10.935	-20.208	110.19104	-54.5	11.2	-81.2	35.8	1.05876	0.836	-89.7	68.0	38.6	33.3	28.2	2.45011	4-5
6	-10.942	-20.366	108.06283	-52.2	10.7	-81.3	36.1	1.03828	0.854	-89.7	67.8	40.8	31.4	25.8	4.70303	5-6
7	-10.867	-20.381	107.27827	-53.9	10.6	-80.7	35.9	1.03078	0.861	-88.4	67.8	40.8	30.6	26.0	2.30982	6-7

JULY 31, 1964 13 HR 25 MIN. 9 SEC 775 MS TAB NO 144 ATLAS PHOTO NO 144 POD SEQUENCE NO 933

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
39.025 91.19589 -10.044 -21.874 1826.651 2.561 -64.993 114.985

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.894	-20.302	106.41497	-54.2	10.9	-80.9	35.8	1.02272	0.849	-89.0	67.9	39.7	31.9	27.1	0.	1-2
3	-10.863	-20.385	105.04709	-53.9	10.6	-80.7	35.9	1.00934	0.861	-88.4	67.8	40.8	30.6	26.0	2.65959	2-3
4	-10.852	-20.233	107.06972	-56.1	11.1	-80.5	35.5	1.02873	0.843	-88.2	68.0	38.6	32.5	28.4	4.55101	3-4
5	-10.929	-20.216	107.89855	-54.5	11.2	-81.2	35.8	1.03673	0.837	-89.7	68.0	38.6	33.2	28.2	2.39909	4-5
6	-10.936	-20.370	105.81510	-52.2	10.6	-81.3	36.1	1.01668	0.854	-89.7	67.8	40.8	31.4	25.8	4.60496	5-6
7	-10.863	-20.385	105.04709	-53.9	10.6	-80.7	35.9	1.00934	0.861	-88.4	67.8	40.8	30.6	26.0	2.26171	6-7

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JULY 31, 1964 13 HR 25 MIN 15 SEC 654 MS TAB NO 151 ATLAS PHOTO NO 151 POD SEQUENCE NO 940

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		33.145	77.53793	-10.128	-21.689	1812.993	2.568	-64.872	114.951							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.856	-20.342	90.55651	-54.2	10.9	-80.9	35.8	0.87031	0.849	-89.0	67.9	39.7	31.9	27.0	0.	1-2
3	-10.829	-20.413	89.39427	-53.9	10.5	-80.7	35.8	0.85894	0.861	-88.4	67.8	40.8	30.6	26.0	2.26235	2-3
4	-10.820	-20.283	91.11277	-56.1	11.1	-80.5	35.5	0.87542	0.844	-88.2	67.9	38.6	32.5	28.3	3.87160	3-4
5	-10.886	-20.269	91.81641	-54.5	11.2	-81.2	35.7	0.88221	0.837	-89.7	67.9	38.6	33.2	28.1	2.04091	4-5
6	-10.891	-20.401	90.04666	-52.3	10.6	-81.3	36.1	0.86517	0.855	-89.7	67.8	40.8	31.3	25.8	3.91732	5-6
7	-10.829	-20.413	89.39427	-53.9	10.5	-80.7	35.8	0.85894	0.861	-88.4	67.8	40.8	30.6	26.0	1.92423	6-7

JULY 31, 1964 13 HR 25 MIN 16 SEC 494 MS TAB NO 152 ATLAS PHOTO NO 152 POD SEQUENCE NO 941

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		32.305	75.58443	-10.141	-21.662	1811.040	2.570	-64.855	114.946							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.851	-20.348	88.28581	-54.2	10.9	-80.9	35.8	0.84849	0.849	-89.0	67.8	39.7	31.9	27.0	0.	1-2
3	-10.824	-20.417	87.15299	-53.9	10.5	-80.7	35.8	0.83740	0.861	-88.4	67.8	40.8	30.6	26.0	2.20548	2-3
4	-10.815	-20.291	88.82797	-56.1	11.1	-80.5	35.5	0.85346	0.844	-88.2	67.9	38.6	32.5	28.3	3.77434	3-4
5	-10.880	-20.277	89.51376	-54.5	11.2	-81.2	35.7	0.86008	0.837	-89.7	67.9	38.6	33.2	28.1	1.98968	4-5
6	-10.885	-20.405	87.78862	-52.3	10.6	-81.3	36.1	0.84348	0.855	-89.7	67.8	40.8	31.3	25.8	3.81888	5-6
7	-10.824	-20.417	87.15299	-53.9	10.5	-80.7	35.8	0.83740	0.861	-88.4	67.8	40.8	30.6	26.0	1.87591	6-7

JULY 31, 1964 13 HR 25 MIN 17 SEC 334 MS TAB NO 153 ATLAS PHOTO NO 153 POD SEQUENCE NO 942

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		31.465	73.63036	-10.153	-21.636	1809.086	2.571	-64.838	114.941							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.845	-20.354	86.01394	-54.2	10.9	-80.9	35.8	0.82665	0.859	-89.0	67.8	39.7	31.9	27.0	0.	1-2
3	-10.824	-20.421	84.91052	-53.9	10.5	-80.7	35.8	0.81586	0.861	-88.4	67.8	40.8	30.6	26.0	2.14860	2-3
4	-10.811	-20.298	86.54200	-56.1	11.1	-80.5	35.5	0.83150	0.844	-88.2	67.9	38.6	32.4	28.3	3.67704	3-4
5	-10.873	-20.284	87.20989	-54.5	11.2	-81.2	35.7	0.83795	0.837	-89.7	67.9	38.6	33.2	28.1	1.93835	4-5
6	-10.879	-20.409	85.52960	-52.3	10.6	-81.3	36.0	0.82177	0.855	-89.7	67.8	40.8	31.3	25.8	3.72041	5-6
7	-10.820	-20.421	84.91052	-53.9	10.5	-80.7	35.8	0.81586	0.861	-88.4	67.8	40.8	30.6	26.0	1.82750	6-7

JULY 31, 1964 13 HR 25 MIN 18 SEC 174 MS TAB NO 154 ATLAS PHOTO NO 154 POD SEQUENCE NO 943

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		30.625	71.67569	-10.165	-21.609	1807.131	2.572	-64.820	114.936							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.840	-20.360	83.74083	-54.2	10.9	-80.9	35.8	0.80481	0.849	-89.0	67.8	39.7	31.8	27.0	0.	1-2
3	-10.815	-20.425	82.66680	-53.9	10.5	-80.7	35.8	0.79430	0.861	-88.4	67.8	40.8	30.6	26.0	2.09171	2-3
4	-10.806	-20.305	84.25479	-56.1	11.1	-80.5	35.5	0.80952	0.844	-88.2	67.9	38.6	32.4	28.3	3.57969	3-4
5	-10.867	-20.292	84.90481	-54.5	11.2	-81.2	35.7	0.81580	0.837	-89.7	67.9	38.6	33.2	28.1	1.88702	4-5
6	-10.872	-20.414	83.26935	-52.3	10.6	-81.3	36.0	0.80006	0.855	-89.7	67.8	40.8	31.3	25.8	3.62189	5-6
7	-10.815	-20.425	82.66680	-53.9	10.5	-80.7	35.8	0.79430	0.861	-88.4	67.8	40.8	30.6	26.0	1.77918	6-7

JULY 31, 1964 13 HR 25 MIN 19 SEC 14 MS TAB NO 155 ATLAS PHOTO NO 155 POD SEQUENCE NO 944

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		29.785	69.72058	-10.178	-21.582	1805.176	2.573	-64.803	114.931							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.834	-20.366	81.46663	-54.2	10.9	-80.9	35.8	0.78295	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1-2
3	-10.810	-20.430	80.42204	-53.9	10.5	-80.7	35.8	0.77273	0.861	-88.4	67.8	40.8	30.6	25.9	2.03474	2-3
4	-10.801	-20.313	81.96652	-56.1	11.1	-80.5	35.5	0.78754	0.844	-88.2	67.9	38.6	32.4	28.3	3.48231	3-4
5	-10.861	-20.300	82.59866	-54.5	11.2	-81.2	35.7	0.79364	0.837	-89.7	67.9	38.6	33.1	28.1	1.83579	4-5
6	-10.866	-20.418	81.00803	-52.3	10.6	-81.3	36.0	0.77833	0.855	-89.7	67.8	40.8	31.3	25.8	3.52333	5-6
7	-10.810	-20.430	80.42204	-53.9	10.5	-80.7	35.8	0.77273	0.861	-88.4	67.8	40.8	30.6	25.9	1.73077	6-7

JULY 31, 1964 13 HR 25 MIN 19 SEC 854 MS TAB NO 156 ATLAS PHOTO NO 156 POD SEQUENCE NO 945

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		28.945	67.76457	-10.190	-21.555	1803.220	2.574	-64.785	114.926							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.829	-20.372	79.19084	-54.2	10.9	-80.9	35.8	0.76108	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1-2
3	-10.805	-20.434	78.17567	-53.9	10.5	-80.7	35.8	0.75115	0.861	-88.4	67.8	40.8	30.5	25.9	1.97783	2-3
4	-10.797	-20.320	79.67665	-56.1	11.1	-80.5	35.5	0.76554	0.844	-88.2	67.9	38.6	32.4	28.3	3.38489	3-4
5	-10.854	-20.308	80.29090	-54.5	11.2	-81.2	35.7	0.77147	0.838	-89.7	67.9	38.6	33.1	28.1	1.78436	4-5
6	-10.859	-20.423	78.74513	-52.3	10.6	-81.3	36.0	0.75659	0.855	-89.7	67.8	40.8	31.3	25.8	3.42471	5-6
7	-10.805	-20.434	78.17567	-53.9	10.5	-80.7	35.8	0.75115	0.861	-88.4	67.8	40.8	30.5	25.9	1.68245	6-7

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JULY 31, 1964 13 HR 25 MIN 20 SEC 694 MS TAB NO 157 ATLAS PHOTO NO 157 POD SEQUENCE NO 946

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				28.105		65.80832	-10.202	-21.528	1801.264	2.575	-64.768	114.921		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.823	-20.378	76.91423	-54.2	10.9	-80.9	35.8	0.73920	0.850	-89.0	67.8	39.7	27.0	0.
3	-10.800	-20.438	75.92846	-53.9	10.5	-80.7	35.8	0.72955	0.861	-88.4	67.8	40.8	30.5	25.9
4	-10.792	-20.328	77.38593	-56.1	11.1	-80.5	35.5	0.74353	0.844	-88.2	67.9	38.6	32.4	28.3
5	-10.848	-20.315	77.98233	-54.5	11.2	-81.2	35.7	0.74928	0.838	-89.7	67.9	38.6	33.1	28.1
6	-10.853	-20.427	76.48139	-52.3	10.6	-81.3	36.0	0.73464	0.855	-89.7	67.8	40.8	31.3	25.7
7	-10.800	-20.438	75.92846	-53.9	10.5	-80.7	35.8	0.72955	0.861	-88.4	67.8	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 21 SEC 534 MS TAB NO 158 ATLAS PHOTO NO 158 POD SEQUENCE NO 947

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				27.265		63.85132	-10.215	-21.501	1799.307	2.576	-64.750	114.916		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.817	-20.384	74.63619	-54.2	10.9	-80.9	35.8	0.71730	0.850	-89.0	67.8	39.7	27.0	0.
3	-10.795	-20.442	73.67985	-53.9	10.5	-80.7	35.8	0.70755	0.862	-88.4	67.8	40.8	30.5	25.9
4	-10.788	-20.335	75.09360	-56.1	11.1	-80.5	35.5	0.72150	0.844	-88.2	67.9	38.6	32.4	28.3
5	-10.842	-20.323	75.67233	-54.5	11.2	-81.2	35.7	0.72709	0.838	-89.7	67.9	38.6	33.1	28.1
6	-10.847	-20.432	74.21622	-52.3	10.6	-81.3	36.0	0.71307	0.855	-89.7	67.8	40.8	31.3	25.7
7	-10.795	-20.442	73.67985	-53.9	10.5	-80.7	35.8	0.70755	0.862	-88.4	67.8	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 22 SEC 374 MS TAB NO 159 ATLAS PHOTO NO 159 POD SEQUENCE NO 948

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				26.425		61.89366	-10.227	-21.474	1797.349	2.578	-64.733	114.911		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.812	-20.390	72.35684	-54.2	10.9	-80.9	35.8	0.69540	0.850	-89.0	67.8	39.7	27.0	0.
3	-10.790	-20.446	71.42994	-53.9	10.5	-80.7	35.8	0.68633	0.862	-88.4	67.7	40.8	30.5	25.9
4	-10.783	-20.343	72.80035	-56.1	11.1	-80.5	35.5	0.69947	0.845	-88.2	67.8	38.6	32.4	28.3
5	-10.835	-20.331	73.36102	-54.5	11.2	-81.2	35.7	0.70488	0.838	-89.7	67.9	38.6	33.1	28.1
6	-10.840	-20.436	71.94976	-52.3	10.6	-81.3	36.0	0.69130	0.855	-89.7	67.8	40.8	31.3	25.7
7	-10.790	-20.446	71.42994	-53.9	10.5	-80.7	35.8	0.68633	0.862	-88.4	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 23 SEC 214 MS TAB NO 160 ATLAS PHOTO NO 160 POD SEQUENCE NO 949

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				25.585		59.93552	-10.239	-21.447	1795.391	2.579	-64.715	114.906		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.806	-20.396	70.07634	-54.2	10.9	-80.9	35.8	0.67348	0.850	-89.0	67.8	39.7	27.0	0.
3	-10.785	-20.450	69.17885	-53.9	10.5	-80.7	35.8	0.66470	0.862	-88.4	67.7	40.8	30.5	25.9
4	-10.778	-20.350	70.50576	-56.1	11.1	-80.5	35.5	0.67742	0.845	-88.2	67.8	38.6	32.4	28.3
5	-10.829	-20.339	71.04856	-54.5	11.2	-81.2	35.7	0.68266	0.838	-89.7	67.9	38.6	33.1	28.0
6	-10.834	-20.441	69.68215	-52.3	10.6	-81.3	36.0	0.66951	0.855	-89.7	67.8	40.8	31.3	25.7
7	-10.785	-20.450	69.17885	-53.9	10.5	-80.7	35.8	0.66470	0.862	-88.4	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 24 SEC 54 MS TAB NO 161 ATLAS PHOTO NO 161 POD SEQUENCE NO 950

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				24.746		57.97676	-10.252	-21.419	1793.432	2.580	-64.697	114.901		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.801	-20.402	67.79459	-54.2	10.9	-80.9	35.8	0.65155	0.850	-89.0	67.8	39.7	27.0	0.
3	-10.780	-20.455	66.92656	-53.9	10.5	-80.7	35.8	0.64306	0.862	-88.4	67.7	40.8	30.5	25.9
4	-10.773	-20.358	68.20994	-56.1	11.1	-80.5	35.5	0.65536	0.845	-88.2	67.8	38.6	32.4	28.2
5	-10.823	-20.347	68.73487	-54.5	11.2	-81.2	35.7	0.66043	0.838	-89.7	67.8	38.6	33.1	28.0
6	-10.827	-20.445	67.41331	-52.3	10.6	-81.3	36.0	0.64771	0.855	-89.7	67.8	40.8	31.2	25.7
7	-10.780	-20.455	66.92656	-53.9	10.5	-80.7	35.8	0.64306	0.862	-88.4	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 24 SEC 894 MS TAB NO 162 ATLAS PHOTO NO 162 POD SEQUENCE NO 951

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ		
				23.906		56.01715	-10.264	-21.392	1791.472	2.581	-64.680	114.895		
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.795	-20.408	65.51128	-54.2	10.9	-80.9	35.8	0.62961	0.850	-89.0	67.8	39.7	27.0	0.
3	-10.775	-20.459	64.67267	-53.9	10.5	-80.7	35.8	0.62140	0.862	-88.3	67.7	40.8	30.5	25.9
4	-10.769	-20.365	65.91251	-56.1	11.1	-80.5	35.5	0.63329	0.845	-88.2	67.8	38.6	32.4	28.2
5	-10.816	-20.355	66.41960	-54.5	11.2	-81.2	35.7	0.63818	0.838	-89.7	67.8	38.6	33.1	28.0
6	-10.821	-20.450	65.14288	-52.3	10.6	-81.3	36.0	0.62590	0.855	-89.7	67.7	40.8	31.2	25.7
7	-10.775	-20.459	64.67267	-53.9	10.5	-80.7	35.8	0.62140	0.862	-88.3	67.7	40.8	30.5	25.9

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JULY 31, 1964 13 HR 25 MIN 25 SEC 734 MS

TAB NO 163

ATLAS PHOTO NO 163

POD SEQUENCE NO 952

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				73.066		54.05740	-10.277	-21.365	1789.513	2.587	-64.662	114.890				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.789	-20.414	63.22725	-54.2	10.9	-80.9	35.8	C.60766	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1- 2
3	-10.771	-20.463	62.41810	-53.9	10.5	-80.7	35.8	C.59974	0.862	-88.3	67.7	40.8	30.5	25.9	1.57842	2- 3
4	-10.766	-20.373	63.61440	-56.1	11.1	-80.5	35.5	C.61121	0.845	-88.2	67.8	38.6	32.4	28.2	2.70163	3- 4
5	-10.810	-20.363	64.10364	-54.5	11.2	-81.2	35.7	C.61593	0.838	-89.7	67.8	38.6	33.1	28.0	1.42425	4- 5
6	-10.814	-20.454	62.87176	-52.3	10.6	-81.3	36.0	C.60408	0.855	-89.7	67.7	40.8	31.2	25.7	2.73329	5- 6
7	-10.771	-20.463	62.41810	-53.9	10.5	-80.7	35.8	C.59974	0.862	-88.3	67.7	40.8	30.5	25.9	1.34301	6- 7

JULY 31, 1964 13 HR 25 MIN 26 SEC 574 MS

TAB NO 164

ATLAS PHOTO NO 164

POD SEQUENCE NO 953

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				22.226		52.09682	-10.289	-21.337	1787.552	2.583	-64.644	114.885				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.784	-20.420	60.94168	-54.2	10.9	-80.9	35.8	C.58569	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1- 2
3	-10.766	-20.468	60.16197	-53.9	10.5	-80.7	35.8	C.57806	0.862	-88.3	67.7	40.8	30.5	25.9	1.52127	2- 3
4	-10.759	-20.380	61.31473	-56.1	11.1	-80.5	35.5	C.58912	0.845	-88.2	67.8	38.6	32.4	28.2	2.60383	3- 4
5	-10.804	-20.371	61.78611	-54.5	11.2	-81.2	35.7	C.59366	0.838	-89.7	67.8	38.6	33.1	28.0	1.37272	4- 5
6	-10.808	-20.459	60.59909	-52.3	10.6	-81.3	36.0	C.58224	0.855	-89.7	67.7	40.8	31.2	25.7	2.63434	5- 6
7	-10.766	-20.468	60.16197	-53.9	10.5	-80.7	35.8	C.57806	0.862	-88.3	67.7	40.8	30.5	25.9	1.29439	6- 7

JULY 31, 1964 13 HR 25 MIN 27 SEC 414 MS

TAB NO 165

ATLAS PHOTO NO 165

POD SEQUENCE NO 954

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				21.385		50.13568	-10.302	-21.310	1785.591	2.585	-64.626	114.880				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.778	-20.426	58.65491	-54.2	10.8	-80.9	35.8	C.56371	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1- 2
3	-10.761	-20.472	57.90464	-53.9	10.5	-80.7	35.8	C.55637	0.862	-88.3	67.7	40.8	30.5	25.9	1.46409	2- 3
4	-10.755	-20.388	59.01387	-56.1	11.1	-80.5	35.5	C.56701	0.845	-88.2	67.8	38.6	32.3	28.2	2.50600	3- 4
5	-10.797	-20.379	59.46741	-54.5	11.2	-81.2	35.7	C.57139	0.838	-89.7	67.8	38.6	33.1	28.0	1.32109	4- 5
6	-10.801	-20.464	58.32524	-52.3	10.6	-81.3	36.0	C.56039	0.855	-89.7	67.7	40.8	31.2	25.7	2.53534	5- 6
7	-10.761	-20.472	57.90464	-53.9	10.5	-80.7	35.8	C.55637	0.862	-88.3	67.7	40.8	30.5	25.9	1.24577	6- 7

JULY 31, 1964 13 HR 25 MIN 28 SEC 254 MS

TAB NO 166

ATLAS PHOTO NO 166

POD SEQUENCE NO 955

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				20.546		48.17369	-10.314	-21.282	1783.629	2.586	-64.609	114.875				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.772	-20.432	56.36659	-54.2	10.8	-80.9	35.8	C.54172	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1- 2
3	-10.756	-20.476	55.64577	-53.9	10.5	-80.7	35.8	C.53467	0.862	-88.3	67.7	40.8	30.5	25.9	1.40687	2- 3
4	-10.750	-20.395	56.71144	-56.1	11.1	-80.5	35.5	C.54469	0.845	-88.2	67.8	38.6	32.3	28.2	2.40814	3- 4
5	-10.791	-20.387	57.14713	-54.5	11.2	-81.2	35.7	C.54909	0.838	-89.7	67.8	38.6	33.0	28.0	1.26955	4- 5
6	-10.794	-20.468	56.04982	-52.3	10.6	-81.3	36.0	C.53853	0.855	-89.7	67.7	40.8	31.2	25.7	2.43629	5- 6
7	-10.756	-20.476	55.64577	-53.9	10.5	-80.7	35.8	C.53467	0.862	-88.3	67.7	40.8	30.5	25.9	1.19715	6- 7

JULY 31, 1964 13 HR 25 MIN 29 SEC 94 MS

TAB NO 167

ATLAS PHOTO NO 167

POD SEQUENCE NO 956

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				19.706		46.21152	-10.327	-21.255	1781.667	2.587	-64.591	114.870				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.767	-20.438	54.07752	-54.2	10.8	-80.9	35.8	C.51972	0.850	-89.0	67.8	39.7	31.8	27.0	0.	1- 2
3	-10.751	-20.481	53.38614	-53.9	10.5	-80.7	35.8	C.51256	0.862	-88.3	67.7	40.8	30.5	25.9	1.34967	2- 3
4	-10.745	-20.403	54.40828	-56.1	11.1	-80.5	35.5	C.52276	0.845	-88.2	67.8	38.6	32.3	28.2	2.31021	3- 4
5	-10.784	-20.395	54.82613	-54.5	11.2	-81.2	35.7	C.52679	0.838	-89.7	67.8	38.6	33.0	28.0	1.21793	4- 5
6	-10.788	-20.473	53.77366	-52.3	10.6	-81.3	36.0	C.51666	0.856	-89.7	67.7	40.8	31.2	25.7	2.37221	5- 6
7	-10.751	-20.481	53.38614	-53.9	10.5	-80.7	35.8	C.51256	0.862	-88.3	67.7	40.8	30.5	25.9	1.14843	6- 7

JULY 31, 1964 13 HR 25 MIN 29 SEC 934 MS

TAB NO 168

ATLAS PHOTO NO 168

POD SEQUENCE NO 957

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				18.866		44.24837	-10.340	-21.227	1779.704	2.588	-64.573	114.864				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.761	-20.444	51.76683	-54.2	10.8	-80.9	35.8	C.49771	0.850	-89.0	67.7	39.7	31.7	26.9	0.	1- 2
3	-10.746	-20.485	51.12469	-53.9	10.5	-80.7	35.8	C.49123	0.862	-88.3	67.7	40.8	30.5	25.9	1.29244	2- 3
4	-10.740	-20.411	52.10346	-56.1	11.1	-80.5	35.5	C.50061	0.845	-88.2	67.8	38.6	32.3	28.2	2.21223	3- 4
5	-10.774	-20.403	52.50346	-54.5	11.2	-81.2	35.7	C.50447	0.839	-89.7	67.8	38.6	33.0	28.0	1.16630	4- 5
6	-10.781	-20.478	51.49591	-52.3	10.6	-81.3	36.0	C.49478	0.856	-89.7	67.7	40.8	31.2	25.7	2.23808	5- 6
7	-10.746	-20.485	51.12469	-53.9	10.5	-80.7	35.8	C.49123	0.862	-88.3	67.7	40.8	30.5	25.9	1.09980	6- 7

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JULY 31, 1964 13 HR 25 MIN 30 SEC 774 MS TAB NO 169 ATLAS PHOTO NO 169 POD SEQUENCE NO 958

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				18.026		42.28503	-10.352	-21.199	1777.740	2.589	-64.555	114.859		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.755	-20.451	49.49534	-54.2	10.8	-80.9	35.8	0.47568	0.850	-89.0	67.7	39.7	31.7	26.9
3	-10.741	-20.449	48.86285	-53.9	10.5	-80.7	35.8	0.46950	0.862	-88.3	67.7	40.8	30.5	25.9
4	-10.736	-20.418	49.79785	-56.1	11.1	-80.5	35.5	0.47846	0.845	-88.2	67.8	38.6	32.3	28.2
5	-10.772	-20.411	50.18006	-54.5	11.2	-81.2	35.7	0.48215	0.839	-89.7	67.8	38.6	33.0	28.0
6	-10.775	-20.462	49.21735	-52.3	10.6	-81.3	36.0	0.47288	0.856	-89.7	67.7	40.8	31.2	25.7
7	-10.741	-20.489	48.86285	-53.9	10.5	-80.7	35.8	0.46950	0.862	-88.3	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 31 SEC 613 MS TAB NO 170 ATLAS PHOTO NO 170 POD SEQUENCE NO 959

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				17.186		40.32085	-10.365	-21.171	1775.776	2.590	-64.537	114.854		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.750	-20.457	47.20228	-54.2	10.8	-80.9	35.8	0.45365	0.851	-89.0	67.7	39.7	31.7	26.9
3	-10.736	-20.494	46.59924	-53.9	10.5	-80.7	35.8	0.44775	0.862	-88.3	67.7	40.8	30.5	25.9
4	-10.731	-20.426	47.49068	-56.1	11.1	-80.5	35.5	0.45629	0.845	-88.2	67.8	38.6	32.3	28.2
5	-10.765	-20.419	47.85507	-54.5	11.2	-81.2	35.7	0.45981	0.839	-89.7	67.8	38.6	33.0	28.0
6	-10.768	-20.487	46.93722	-52.3	10.6	-81.3	36.0	0.45058	0.856	-89.7	67.7	40.8	31.2	25.7
7	-10.736	-20.494	46.59924	-53.9	10.5	-80.7	35.8	0.44775	0.862	-88.3	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 32 SEC 453 MS TAB NO 171 ATLAS PHOTO NO 171 POD SEQUENCE NO 960

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				16.346		38.35606	-10.378	-21.144	1773.811	2.592	-64.519	114.848		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.744	-20.463	44.90793	-54.2	10.8	-80.9	35.8	0.43160	0.851	-89.0	67.7	39.7	31.7	26.9
3	-10.731	-20.498	44.33433	-53.9	10.5	-80.7	35.8	0.42598	0.862	-88.3	67.7	40.8	30.5	25.9
4	-10.726	-20.434	45.18222	-56.1	11.1	-80.5	35.5	0.43411	0.845	-88.2	67.8	38.6	32.3	28.2
5	-10.759	-20.427	45.52880	-54.5	11.2	-81.2	35.7	0.43746	0.839	-89.7	67.8	38.6	33.0	28.0
6	-10.762	-20.492	44.65583	-52.3	10.6	-81.3	36.0	0.42906	0.856	-89.7	67.7	40.8	31.2	25.7
7	-10.731	-20.498	44.33433	-53.9	10.5	-80.7	35.8	0.42598	0.862	-88.3	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 33 SEC 293 MS TAB NO 172 ATLAS PHOTO NO 172 POD SEQUENCE NO 961

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				15.506		36.39053	-10.390	-21.116	1771.846	2.593	-64.501	114.843		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.738	-20.469	42.61213	-54.2	10.8	-80.9	35.8	0.40953	0.851	-89.0	67.7	39.7	31.7	26.9
3	-10.726	-20.503	42.06799	-53.9	10.5	-80.7	35.8	0.40421	0.862	-88.3	67.7	40.8	30.5	25.9
4	-10.721	-20.442	42.87230	-56.1	11.1	-80.5	35.5	0.41192	0.846	-88.2	67.7	38.6	32.3	28.2
5	-10.752	-20.435	43.20107	-54.5	11.2	-81.2	35.7	0.41509	0.839	-89.7	67.8	38.6	33.0	27.9
6	-10.755	-20.497	42.37295	-52.3	10.6	-81.3	36.0	0.40712	0.856	-89.7	67.7	40.8	31.2	25.7
7	-10.726	-20.503	42.06799	-53.9	10.5	-80.7	35.8	0.40421	0.862	-88.3	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 34 SEC 133 MS TAB NO 173 ATLAS PHOTO NO 173 POD SEQUENCE NO 962

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				14.666		34.42470	-10.403	-21.088	1769.880	2.594	-64.483	114.838		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.733	-20.476	40.31536	-54.2	10.8	-80.9	35.8	0.38746	0.851	-89.0	67.7	39.7	31.7	26.9
3	-10.721	-20.507	39.80069	-53.9	10.5	-80.7	35.8	0.38242	0.862	-88.3	67.7	40.8	30.5	25.9
4	-10.716	-20.449	40.56144	-56.1	11.1	-80.5	35.5	0.38972	0.846	-88.2	67.7	38.6	32.3	28.2
5	-10.746	-20.443	40.87238	-54.5	11.2	-81.2	35.7	0.39272	0.839	-89.7	67.7	38.6	33.0	27.9
6	-10.748	-20.501	40.08915	-52.3	10.6	-81.3	36.0	0.38518	0.856	-89.7	67.7	40.8	31.2	25.7
7	-10.721	-20.507	39.80069	-53.9	10.5	-80.7	35.8	0.38242	0.862	-88.3	67.7	40.8	30.5	25.9

JULY 31, 1964 13 HR 25 MIN 34 SEC 973 MS TAB NO 174 ATLAS PHOTO NO 174 POD SEQUENCE NO 963

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				13.826		32.45801	-10.416	-21.060	1767.913	2.595	-64.465	114.833		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.727	-20.442	38.01705	-54.2	10.8	-80.9	35.8	0.36597	0.851	-89.0	67.7	39.7	31.7	26.9
3	-10.715	-20.512	37.53183	-53.9	10.5	-80.7	35.8	0.36062	0.862	-88.3	67.7	40.8	30.4	25.9
4	-10.712	-20.457	38.24902	-56.1	11.1	-80.5	35.5	0.36750	0.846	-88.2	67.7	38.6	32.3	28.1
5	-10.739	-20.451	38.54214	-54.5	11.2	-81.2	35.7	0.37033	0.839	-89.7	67.7	38.6	33.0	27.9
6	-10.742	-20.506	37.80378	-52.3	10.6	-81.3	36.0	0.36322	0.856	-89.7	67.7	40.8	31.2	25.7
7	-10.715	-20.512	37.53183	-53.9	10.5	-80.7	35.8	0.36062	0.862	-88.3	67.7	40.8	30.4	25.9

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JULY 31, 1964 13 HR 25 MIN 35 SEC 813 MS TAB NO 175 ATLAS PHOTO NO 175 POD SEQUENCE NO 964

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		12.986		30.49107		-10.429		-21.031		1765.946		2.596		-64.447		114.827	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.721	-20.488	35.71704	-54.2	10.8	-80.9	35.8	0.34327	0.851	-89.0	67.7	39.7	31.7	26.9	0.	1-2	
3	-10.710	-20.516	35.26209	-53.9	10.5	-80.7	35.8	0.33881	0.862	-88.3	67.7	40.8	30.4	25.9	0.89100	2-3	
4	-10.707	-20.465	35.93570	-56.1	11.1	-80.5	35.6	0.34527	0.846	-88.2	67.7	38.6	32.3	28.1	1.52522	3-4	
5	-10.733	-20.459	36.21102	-54.5	11.2	-81.2	35.7	0.34793	0.839	-89.7	67.7	38.6	33.0	27.9	0.80419	4-5	
6	-10.735	-20.511	35.51751	-52.3	10.6	-81.3	36.0	0.34125	0.856	-89.7	67.7	40.8	31.2	25.7	1.54296	5-6	
7	-10.710	-20.516	35.26209	-53.9	10.5	-80.7	35.8	0.33881	0.862	-88.3	67.7	40.8	30.4	25.9	0.75834	6-7	

JULY 31, 1964 13 HR 25 MIN 36 SEC 653 MS TAB NO 176 ATLAS PHOTO NO 176 POD SEQUENCE NO 965

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		12.146		28.52318		-10.442		-21.003		1763.978		2.598		-64.428		114.822	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.715	-20.494	33.41694	-54.2	10.8	-80.9	35.8	0.32116	0.851	-89.0	67.7	39.7	31.7	26.9	0.	1-2	
3	-10.705	-20.521	32.99066	-53.9	10.5	-80.7	35.8	0.31699	0.862	-88.3	67.7	40.8	30.4	25.9	0.83355	2-3	
4	-10.702	-20.473	33.62070	-56.1	11.1	-80.5	35.6	0.32303	0.846	-88.2	67.7	38.6	32.3	28.1	1.42688	3-4	
5	-10.726	-20.467	33.67820	-54.5	11.1	-81.2	35.7	0.32551	0.839	-89.7	67.7	38.6	33.0	27.9	0.75236	4-5	
6	-10.728	-20.516	33.22956	-52.3	10.6	-81.3	36.0	0.31927	0.856	-89.7	67.7	40.8	31.1	25.7	1.44349	5-6	
7	-10.705	-20.521	32.99066	-53.9	10.5	-80.7	35.8	0.31699	0.862	-88.3	67.7	40.8	30.4	25.9	0.70951	6-7	

JULY 31, 1964 13 HR 25 MIN 37 SEC 493 MS TAB NO 177 ATLAS PHOTO NO 177 POD SEQUENCE NO 966

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		11.306		26.55478		-10.454		-20.975		1762.010		2.599		-64.410		114.816	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.709	-20.501	31.11485	-54.2	10.8	-80.9	35.8	0.29903	0.851	-89.0	67.7	39.7	31.7	26.9	0.	1-2	
3	-10.700	-20.525	30.71803	-53.9	10.5	-80.7	35.8	0.29515	0.862	-88.3	67.7	40.8	30.4	25.9	0.77607	2-3	
4	-10.697	-20.481	31.30449	-56.1	11.1	-80.5	35.6	0.30078	0.846	-88.2	67.7	38.6	32.2	28.1	1.32851	3-4	
5	-10.720	-20.476	31.54417	-54.5	11.1	-81.2	35.7	0.30309	0.839	-89.7	67.7	38.6	32.9	27.9	0.70053	4-5	
6	-10.722	-20.521	30.94041	-52.4	10.6	-81.3	36.0	0.29728	0.856	-89.7	67.7	40.8	31.1	25.7	1.34394	5-6	
7	-10.700	-20.525	30.71803	-53.9	10.5	-80.7	35.8	0.29515	0.862	-88.3	67.7	40.8	30.4	25.9	0.66059	6-7	

JULY 31, 1964 13 HR 25 MIN 38 SEC 333 MS TAB NO 178 ATLAS PHOTO NO 178 POD SEQUENCE NO 967

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		10.466		24.58597		-10.467		-20.947		1760.041		2.600		-64.392		114.811	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.704	-20.507	28.81165	-54.2	10.8	-80.9	35.8	0.27690	0.851	-89.0	67.7	39.7	31.7	26.9	0.	1-2	
3	-10.695	-20.530	28.44431	-53.9	10.5	-80.7	35.8	0.27331	0.862	-88.3	67.7	40.8	30.4	25.8	0.71854	2-3	
4	-10.692	-20.488	28.98721	-56.1	11.1	-80.5	35.6	0.27851	0.846	-88.2	67.7	38.6	32.2	28.1	1.23010	3-4	
5	-10.713	-20.484	29.20910	-54.5	11.1	-81.2	35.7	0.28065	0.839	-89.7	67.7	38.6	32.9	27.9	0.64870	4-5	
6	-10.715	-20.526	28.65017	-52.4	10.6	-81.3	35.9	0.27527	0.856	-89.7	67.7	40.8	31.1	25.6	1.24439	5-6	
7	-10.695	-20.530	28.44431	-53.9	10.5	-80.7	35.8	0.27331	0.862	-88.3	67.7	40.8	30.4	25.8	0.61166	6-7	

JULY 31, 1964 13 HR 25 MIN 39 SEC 173 MS TAB NO 179 ATLAS PHOTO NO 179 POD SEQUENCE NO 968

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		9.626		22.61629		-10.480		-20.918		1758.072		2.601		-64.373		114.806	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.698	-20.514	26.50690	-54.2	10.8	-80.9	35.8	0.25475	0.851	-89.0	67.7	39.7	31.7	26.9	0.	1-2	
3	-10.690	-20.534	26.16901	-53.9	10.5	-80.7	35.8	0.25144	0.863	-88.3	67.7	40.8	30.4	25.8	0.66107	2-3	
4	-10.687	-20.496	26.66833	-56.1	11.1	-80.5	35.6	0.25623	0.846	-88.2	67.7	38.6	32.2	28.1	1.13164	3-4	
5	-10.706	-20.492	26.87241	-54.5	11.1	-81.2	35.7	0.25820	0.840	-89.7	67.7	38.6	32.9	27.9	0.59677	4-5	
6	-10.708	-20.531	26.35835	-52.4	10.6	-81.3	35.9	0.25325	0.856	-89.7	67.7	40.8	31.1	25.6	1.14477	5-6	
7	-10.690	-20.534	26.16901	-53.9	10.5	-80.7	35.8	0.25144	0.863	-88.3	67.7	40.8	30.4	25.8	0.56273	6-7	

JULY 31, 1964 13 HR 25 MIN 40 SEC 13 MS TAB NO 180 ATLAS PHOTO NO 180 POD SEQUENCE NO 969

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		8.786		20.64612		-10.493		-20.890		1756.101		2.602		-64.355		114.800	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.692	-20.520	24.20096	-54.2	10.8	-80.9	35.8	0.23259	0.851	-89.0	67.7	39.7	31.7	26.9	0.	1-2	
3	-10.685	-20.539	23.89255	-53.9	10.5	-80.7	35.8	0.22957	0.863	-88.3	67.6	40.8	30.4	25.8	0.60349	2-3	
4	-10.682	-20.504	24.34832	-56.1	11.1	-80.5	35.6	0.23394	0.846	-88.2	67.7	38.6	32.2	28.1	1.03315	3-4	
5	-10.700	-20.500	24.53457	-54.5	11.1	-81.2	35.7	0.23574	0.840	-89.7	67.7	38.6	32.9	27.9	0.54484	4-5	
6	-10.701	-20.535	24.06538	-52.4	10.6	-81.3	35.9	0.23122	0.856	-89.7	67.7	40.8	31.1	25.6	1.04513	5-6	
7	-10.685	-20.539	23.89255	-53.9	10.5	-80.7	35.8	0.22957	0.863	-88.3	67.6	40.8	30.4	25.8	0.51370	6-7	

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JULY 31, 1964 13 HR 25 MIN 40 SEC 853 MS TAB NO 181 ATLAS PHOTO NO 181 POD SEQUENCE NO 970

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				7.947		18.67517		-10.506		-20.861		1754.130		2.604		-64.337		114.795	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.686	-20.526	21.89350	-54.2	10.8	-80.9	35.8	0.21041	0.851	-89.0	67.7	39.7	31.6	26.9	0.	1-2			
3	-10.680	-20.543	21.61455	-53.9	10.5	-80.7	35.8	0.20768	0.863	-88.3	67.6	40.8	30.4	25.8	0.54597	2-3			
4	-10.677	-20.512	22.02674	-56.1	11.1	-80.5	35.6	0.21163	0.846	-88.2	67.7	38.6	32.2	28.1	0.93459	3-4			
5	-10.693	-20.509	22.19520	-54.5	11.1	-81.2	35.7	0.21326	0.840	-89.7	67.7	38.6	32.9	27.9	0.49281	4-5			
6	-10.695	-20.540	21.77086	-52.4	10.6	-81.3	35.9	0.20918	0.856	-89.7	67.6	40.8	31.1	25.6	0.94543	5-6			
7	-10.680	-20.543	21.61455	-53.9	10.5	-80.7	35.8	0.20768	0.863	-88.3	67.6	40.8	30.4	25.8	0.46487	6-7			

JULY 31, 1964 13 HR 25 MIN 41 SEC 693 MS TAB NO 182 ATLAS PHOTO NO 182 POD SEQUENCE NO 971

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				7.107		16.76384		-10.519		-20.833		1752.159		2.605		-64.318		114.789	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.680	-20.533	19.58497	-54.2	10.8	-80.9	35.8	0.18423	0.851	-89.0	67.7	39.7	31.6	26.9	0.	1-2			
3	-10.674	-20.548	19.55552	-53.9	10.5	-80.7	35.8	0.18578	0.863	-88.3	67.6	40.8	30.4	25.8	0.48834	2-3			
4	-10.672	-20.520	19.70816	-56.1	11.1	-80.5	35.6	0.18932	0.846	-88.2	67.7	38.6	32.2	28.1	0.83599	3-4			
5	-10.687	-20.517	19.85479	-56.5	11.1	-81.2	35.7	0.19077	0.840	-89.7	67.7	38.6	32.9	27.9	0.94078	4-5			
6	-10.688	-20.545	19.47533	-52.4	10.6	-81.3	35.9	0.18712	0.856	-89.7	67.6	40.8	31.1	25.6	0.84568	5-6			
7	-10.674	-20.548	19.33552	-53.9	10.5	-80.7	35.8	0.18578	0.863	-88.3	67.6	40.8	30.4	25.8	0.41584	6-7			

JULY 31, 1964 13 HR 25 MIN 42 SEC 533 MS TAB NO 183 ATLAS PHOTO NO 183 POD SEQUENCE NO 972

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				6.267		14.73192		-10.532		-20.804		1750.187		2.606		-64.300		114.784	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.674	-20.539	17.27519	-54.2	10.8	-80.9	35.8	0.16603	0.851	-89.0	67.6	39.7	31.6	26.8	0.	1-2			
3	-10.669	-20.553	17.05523	-53.9	10.5	-80.7	35.8	0.16387	0.863	-88.3	67.6	40.8	30.4	25.8	0.43067	2-3			
4	-10.667	-20.528	17.38027	-56.1	11.1	-80.5	35.6	0.16699	0.846	-88.2	67.7	38.6	32.2	28.1	0.73736	3-4			
5	-10.680	-20.525	17.51310	-54.5	11.1	-81.2	35.7	0.16827	0.840	-89.7	67.7	38.6	32.9	27.9	0.38884	4-5			
6	-10.681	-20.550	17.17849	-52.4	10.6	-81.3	35.9	0.16505	0.856	-89.7	67.6	40.8	31.1	25.6	0.74590	5-6			
7	-10.669	-20.553	17.05523	-53.9	10.5	-80.7	35.8	0.16387	0.863	-88.3	67.6	40.8	30.4	25.8	0.36661	6-7			

JULY 31, 1964 13 HR 25 MIN 43 SEC 373 MS TAB NO 184 ATLAS PHOTO NO 184 POD SEQUENCE NO 973

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				5.427		12.75926		-10.545		-20.775		1748.215		2.607		-64.281		114.778	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.668	-20.546	14.96395	-54.2	10.8	-80.9	35.8	0.14381	0.851	-89.0	67.6	39.7	31.6	26.8	0.	1-2			
3	-10.664	-20.557	14.77347	-53.9	10.5	-80.7	35.8	0.14195	0.863	-88.3	67.6	40.8	30.4	25.8	0.37301	2-3			
4	-10.662	-20.536	15.05494	-56.1	11.1	-80.5	35.6	0.14465	0.846	-88.2	67.7	38.6	32.2	28.1	0.63867	3-4			
5	-10.673	-20.534	15.16995	-54.5	11.1	-81.2	35.7	0.14576	0.840	-89.7	67.7	38.6	32.9	27.8	0.33681	4-5			
6	-10.674	-20.555	14.88020	-52.4	10.6	-81.3	35.9	0.14297	0.857	-89.7	67.6	40.8	31.1	25.6	0.64606	5-6			
7	-10.664	-20.557	14.77347	-53.9	10.5	-80.7	35.8	0.14195	0.863	-88.3	67.6	40.8	30.4	25.8	0.31757	6-7			

JULY 31, 1964 13 HR 25 MIN 44 SEC 213 MS TAB NO 185 ATLAS PHOTO NO 185 POD SEQUENCE NO 974

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				4.587		10.78586		-10.558		-20.746		1746.241		2.608		-64.263		114.773	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.663	-20.552	12.65118	-54.2	10.8	-80.9	35.8	0.12159	0.852	-89.0	67.6	39.7	31.6	26.8	0.	1-2			
3	-10.659	-20.562	12.49017	-53.9	10.5	-80.7	35.8	0.12001	0.863	-88.3	67.6	40.8	30.4	25.8	0.31537	2-3			
4	-10.657	-20.544	12.72807	-56.1	11.1	-80.5	35.6	0.12229	0.847	-88.2	67.6	38.6	32.2	28.1	0.53992	3-4			
5	-10.667	-20.542	12.82528	-54.5	11.1	-81.2	35.7	0.12323	0.840	-89.7	67.6	38.6	32.9	27.8	0.28468	4-5			
6	-10.667	-20.560	12.58038	-52.4	10.6	-81.3	35.9	0.12087	0.857	-89.7	67.6	40.8	31.1	25.6	0.54618	5-6			
7	-10.659	-20.562	12.49017	-53.9	10.5	-80.7	35.8	0.12001	0.863	-88.3	67.6	40.8	30.4	25.8	0.26854	6-7			

JULY 31, 1964 13 HR 25 MIN 45 SEC 53 MS TAB NO 186 ATLAS PHOTO NO 186 POD SEQUENCE NO 975

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				3.747		8.81204		-10.571		-20.718		1744.267		2.610		-64.244		114.767	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.657	-20.559	10.33729	-54.2	10.8	-80.9	35.8	0.09925	0.852	-89.0	67.6	39.7	31.6	26.8	0.	1-2			
3	-10.654	-20.567	10.20576	-53.9	10.5	-80.7	35.8	0.09806	0.863	-88.3	67.6	40.8	30.4	25.8	0.25769	2-3			
4	-10.652	-20.552	10.40009	-56.1	11.1	-80.5	35.6	0.09992	0.847	-88.2	67.6	38.6	32.2	28.0	0.44114	3-4			
5	-10.660	-20.550	10.47950	-54.5	11.1	-81.1	35.7	0.10069	0.840	-89.7	67.6	38.6	32.9	27.8	0.23264	4-5			
6	-10.661	-20.565	10.27946	-52.4	10.6	-81.3	35.9	0.09877	0.857	-89.7	67.6	40.8	31.1	25.6	0.44624	5-6			
7	-10.654	-20.567	10.20576	-53.9	10.5	-80.7	35.8	0.09806	0.863	-88.3	67.6	40.8	30.4	25.8	0.21951	6-7			

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JULY 31, 1964 13 HR 25 MIN 45 SEC 893 MS TAB NO 187 ATLAS PHOTO NO 187 POD SEQUENCE NO 976

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		2.907		6.83772		-10.584		-20.689		1742.293		2.611		-64.226		114.761	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.651	-20.565	8.02225	-54.2	10.8	-80.9	35.8	0.07710	0.852	-89.0	67.6	39.7	31.6	26.8	0.	1- 2	
3	-10.648	-20.572	7.92021	-53.9	10.5	-80.7	35.8	0.07610	0.863	-88.3	67.6	40.8	30.4	25.8	0.19996	2- 3	
4	-10.647	-20.560	8.07096	-56.1	11.1	-80.5	35.6	0.07755	0.847	-88.2	67.6	38.6	32.2	28.0	0.34233	3- 4	
5	-10.653	-20.559	8.13258	-54.5	11.1	-81.1	35.7	0.07814	0.840	-89.7	67.6	38.6	32.9	27.8	0.18061	4- 5	
6	-10.654	-20.570	7.97734	-52.4	10.6	-81.3	35.9	0.07665	0.857	-89.7	67.6	40.8	31.1	25.6	0.34629	5- 6	
7	-10.648	-20.572	7.92021	-53.9	10.5	-80.7	35.8	0.07610	0.863	-88.3	67.6	40.8	30.4	25.8	0.17027	6- 7	

JULY 31, 1964 13 HR 25 MIN 46 SEC 733 MS TAB NO 188 ATLAS PHOTO NO 188 POD SEQUENCE NO 977

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		2.067		4.86256		-10.598		-20.660		1740.318		2.612		-64.207		114.756	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.645	-20.572	5.70564	-54.2	10.8	-80.9	35.8	0.05484	0.852	-89.0	67.6	39.7	31.6	26.8	0.	1- 2	
3	-10.643	-20.576	5.63308	-53.9	10.5	-80.7	35.8	0.05413	0.863	-88.3	67.6	40.8	30.4	25.8	0.14221	2- 3	
4	-10.642	-20.568	5.74029	-56.1	11.1	-80.5	35.6	0.05515	0.847	-88.2	67.6	38.6	32.2	28.0	0.24347	3- 4	
5	-10.647	-20.567	5.78408	-54.5	11.1	-81.1	35.7	0.05558	0.840	-89.7	67.6	38.6	32.8	27.8	0.12837	4- 5	
6	-10.647	-20.575	5.67374	-52.4	10.5	-81.3	35.9	0.05451	0.857	-89.7	67.6	40.8	31.1	25.6	0.24627	5- 6	
7	-10.643	-20.576	5.63308	-53.9	10.5	-80.7	35.8	0.05413	0.863	-88.3	67.6	40.8	30.4	25.8	0.12104	6- 7	

JULY 31, 1964 13 HR 25 MIN 47 SEC 573 MS TAB NO 189 ATLAS PHOTO NO 189 POD SEQUENCE NO 978

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		1.227		2.88692		-10.611		-20.631		1738.342		2.613		-64.188		114.750	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.639	-20.578	3.38787	-54.2	10.8	-80.9	35.8	0.03256	0.852	-89.0	67.6	39.7	31.6	26.8	0.	1- 2	
3	-10.638	-20.581	3.34481	-53.9	10.5	-80.7	35.8	0.03214	0.863	-88.3	67.6	40.8	30.4	25.8	0.08442	2- 3	
4	-10.637	-20.576	3.40844	-56.1	11.0	-80.5	35.6	0.03275	0.847	-88.2	67.6	38.6	32.1	28.0	0.14454	3- 4	
5	-10.640	-20.576	3.43443	-54.5	11.1	-81.1	35.7	0.03300	0.840	-89.7	67.6	38.6	32.8	27.8	0.07624	4- 5	
6	-10.640	-20.581	3.36895	-52.4	10.5	-81.3	35.9	0.03237	0.857	-89.7	67.6	40.8	31.1	25.6	0.14622	5- 6	
7	-10.638	-20.581	3.34481	-53.9	10.5	-80.7	35.8	0.03214	0.863	-88.3	67.6	40.8	30.4	25.8	0.07190	6- 7	

ULY 31, 1964 13 HR 25 MIN 48 SEC 412 MS TAB NO 190 ATLAS PHOTO NO 190 POD SEQUENCE NO 979

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		0.387		0.91054		-10.624		-20.601		1736.366		2.614		-64.169		114.745	
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.633	-20.585	1.08867	-54.2	10.8	-80.9	35.7	0.01027	0.852	-89.0	67.6	39.7	31.6	26.8	0.	1- 2	
3	-10.632	-20.586	1.05508	-53.9	10.5	-80.7	35.8	0.01014	0.863	-88.3	67.6	40.8	30.4	25.8	0.02663	2- 3	
4	-10.632	-20.584	1.07514	-56.1	11.0	-80.5	35.6	0.01023	0.847	-88.2	67.6	38.6	32.1	28.0	0.04560	3- 4	
5	-10.633	-20.584	1.08335	-54.5	11.1	-81.1	35.7	0.01041	0.840	-89.7	67.6	38.6	32.8	27.8	0.02410	4- 5	
6	-10.633	-20.586	1.06269	-52.4	10.5	-81.3	35.9	0.01021	0.857	-89.7	67.6	40.8	31.1	25.6	0.04612	5- 6	
7	-10.632	-20.586	1.05508	-53.9	10.5	-80.7	35.8	0.01014	0.863	-88.3	67.6	40.8	30.4	25.8	0.02267	6- 7	

TIME- AND CAMERA-DEPENDENT PARAMETERS

RA-VII CAMERA P2

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JULY 31, 1964 13 HR 12 MIN 20 SEC 781 MS TAB NO 1 ATLAS PHOTO NO 1 POD SEQUENCE NO 17

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				808.019	1700.92328	-4.105	-34.166	3436.379	2.010	-73.544	116.823					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.817	-18.105	1858.89355	-56.4	8.9	-83.0	33.2	13.02411	0.832	-90.9	70.0	38.7	34.1	30.5	0.	0-1
2	-12.509	-18.728	1854.78680	-57.4	9.1	-83.0	32.6	13.02434	0.832	-90.6	69.5	39.3	33.7	29.2	27.90291	1-2
3	-11.719	-19.858	1832.92680	-58.1	8.3	-82.6	32.2	12.86854	0.855	-89.7	68.3	40.1	31.3	27.3	41.12521	2-3
4	-11.690	-17.856	1861.79901	-60.9	9.0	-83.1	30.4	13.07084	0.825	-89.7	70.3	38.5	34.4	31.0	59.37405	3-4
5	-13.415	-17.523	1860.16370	-56.6	10.1	-83.5	33.1	13.19952	0.806	-91.6	70.7	38.5	36.2	31.0	53.18788	4-5
6	-13.417	-19.669	1850.36217	-53.6	9.3	-82.9	34.9	12.99025	0.837	-91.6	68.8	40.1	33.2	27.3	60.26708	5-6
7	-11.719	-19.858	1832.92680	-58.1	8.3	-82.6	32.2	12.86854	0.855	-89.7	68.3	40.1	31.3	27.3	52.13593	6-7

JULY 31, 1964 13 HR 12 MIN 42 SEC 619 MS TAB NO 2 ATLAS PHOTO NO 2 POD SEQUENCE NO 43

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				786.180	1658.73978	-4.200	-33.978	3394.195	2.019	-73.402	116.799					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.774	-18.185	1813.41307	-56.4	8.8	-83.0	33.2	12.71585	0.832	-90.9	69.9	38.7	34.0	30.4	0.	0-1
2	-12.906	-18.721	1810.86362	-57.4	9.2	-83.0	32.6	12.71552	0.832	-90.6	69.5	39.3	33.7	29.1	27.16970	1-2
3	-11.735	-19.825	1789.50305	-58.0	8.3	-82.6	32.2	12.56367	0.854	-89.7	68.3	40.1	31.3	27.4	40.16086	2-3
4	-11.706	-17.870	1817.69246	-60.9	9.1	-83.1	30.5	12.76119	0.825	-89.7	70.2	38.5	34.4	31.0	57.96789	3-4
5	-13.391	-17.545	1835.62914	-56.6	10.1	-83.5	33.1	12.88726	0.807	-91.6	70.7	38.5	36.2	31.0	51.93038	4-5
6	-13.393	-19.542	1806.54034	-53.6	9.3	-82.9	34.9	12.86260	0.837	-91.6	68.8	40.1	33.2	27.3	58.83614	5-6
7	-11.735	-19.825	1789.50305	-58.0	8.3	-82.6	32.2	12.56367	0.854	-89.7	68.3	40.1	31.3	27.4	50.90584	6-7

JULY 31, 1964 13 HR 13 MIN 2 SEC 778 MS TAB NO 3 ATLAS PHOTO NO 3 POD SEQUENCE NO 67

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				766.021	1619.66345	-4.290	-33.800	3355.119	2.028	-73.268	116.776					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.741	-18.259	1771.25766	-56.4	8.8	-83.0	33.2	12.43064	0.832	-90.9	69.9	38.8	33.8	30.2	0.	0-1
2	-12.503	-18.710	1770.22408	-57.4	9.2	-83.0	32.6	12.43054	0.832	-90.6	69.5	39.3	33.7	29.2	26.66438	1-2
3	-11.750	-19.789	1749.31870	-58.0	8.3	-82.6	32.3	12.26154	0.854	-89.8	68.4	40.1	31.4	27.4	39.27222	2-3
4	-11.722	-17.879	1776.88742	-60.8	9.1	-83.1	30.6	12.47471	0.825	-89.7	70.2	38.5	34.4	30.9	56.67222	3-4
5	-13.369	-17.560	1794.43318	-56.6	10.1	-83.5	33.1	12.59803	0.807	-91.6	70.7	38.5	36.2	30.9	50.76875	4-5
6	-13.371	-19.512	1765.99179	-53.6	9.3	-82.9	34.8	12.39794	0.836	-91.6	68.8	40.1	33.2	27.3	57.51818	5-6
7	-11.750	-19.789	1749.31870	-58.0	8.3	-82.6	32.3	12.26154	0.854	-89.8	68.4	40.1	31.4	27.4	49.76912	6-7

JULY 31, 1964 13 HR 13 MIN 21 SEC 257 MS TAB NO 4 ATLAS PHOTO NO 4 POD SEQUENCE NO 89

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				747.542	1563.72556	-4.373	-33.633	3319.181	2.035	-73.143	116.755					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.708	-18.327	1732.46707	-56.3	8.8	-83.0	33.2	12.16746	0.832	-91.0	69.8	38.9	33.7	30.1	0.	0-1
2	-12.500	-18.700	1732.72620	-57.4	9.2	-83.0	32.6	12.16723	0.832	-90.6	69.5	39.3	33.7	29.2	26.47699	1-2
3	-11.767	-19.762	1712.24844	-58.0	8.4	-82.6	32.3	12.02128	0.854	-89.8	68.4	40.1	31.4	27.4	38.44833	2-3
4	-11.735	-17.892	1739.23309	-60.7	9.1	-83.1	30.6	12.21036	0.825	-89.8	70.2	38.5	34.4	30.9	55.47123	3-4
5	-13.347	-17.581	1756.41434	-56.6	10.1	-83.5	33.1	12.33112	0.807	-91.7	70.7	38.5	36.2	30.9	49.69538	4-5
6	-13.349	-19.491	1728.58202	-53.6	9.3	-83.0	34.8	12.13531	0.836	-91.6	68.8	40.1	33.3	27.3	56.29630	5-6
7	-11.762	-19.762	1712.24844	-58.0	8.4	-82.6	32.3	12.02128	0.854	-89.8	68.4	40.1	31.4	27.4	48.71921	6-7

JULY 31, 1964 13 HR 13 MIN 43 SEC 96 MS TAB NO 5 ATLAS PHOTO NO 5 POD SEQUENCE NO 115

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				725.704	1541.10461	-4.475	-33.431	3276.560	2.045	-72.993	116.729					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.669	-18.408	1686.43626	-56.3	8.8	-83.0	33.3	11.85468	0.832	-91.0	69.7	38.9	33.5	30.0	0.	0-1
2	-12.494	-18.702	1686.18925	-57.3	9.2	-83.0	32.7	11.85449	0.832	-90.6	69.5	39.3	33.7	29.1	26.47851	1-2
3	-11.775	-19.732	1668.22176	-57.9	8.4	-82.6	32.3	11.71216	0.853	-89.8	68.4	40.1	31.4	27.4	37.66844	2-3
4	-11.748	-17.910	1694.51154	-60.7	9.1	-83.0	30.7	11.89639	0.825	-89.8	70.2	38.5	34.4	30.9	54.04427	3-4
5	-13.319	-17.606	1711.25737	-56.6	10.1	-83.5	33.1	12.01409	0.808	-91.7	70.7	38.5	36.2	30.9	48.41971	4-5
6	-13.321	-19.447	1684.14928	-53.7	9.3	-83.0	34.8	11.82337	0.836	-91.6	68.9	40.1	33.3	27.4	54.84466	5-6
7	-11.775	-19.732	1668.22176	-57.9	8.4	-82.6	32.3	11.71218	0.853	-89.8	68.4	40.1	31.4	27.4	47.47117	6-7

JULY 31, 1964 13 HR 13 MIN 59 SEC 895 MS TAB NO 6 ATLAS PHOTO NO 6 POD SEQUENCE NO 135

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				708.905	1508.20779	-4.555	-33.272	3243.663	2.052	-72.874	116.708					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.638	-18.470	1650.88780	-56.4	8.8	-83.0	33.2	11.61717	0.831	-91.0	69.7	39.0	33.4	29.9	0.	0-1
2	-12.487	-18.661	1654.32721	-57.4	9.2	-83.0	32.6	11.61671	0.831	-90.7	69.6	39.3	33.8	29.2	26.33108	1-2
3	-11.783	-19.671	1634.70613	-58.0	8.4	-82.6	32.3	11.47688	0.853	-89.8	68.5	40.1	31.5	27.5	36.74525	2-3
4	-11.757	-17.884	1660.54368	-60.7	9.1	-83.0	30.7	11.65793	0.825	-89.8	70.3	38.5	34.5	31.0	52.99731	3-4
5	-13.296	-17.586	1676.97121	-56.6	10.1	-83.5	33.1	11.77328	0.807	-91.7	70.7	38.5	36.2	30.9	47.45458	4-5
6	-13.298	-19.411	1650.33237	-53.8	9.3	-83.0	34.7	11.58556	0.836	-91.6	68.9	40.1	33.3	27.4	53.78137	5-6
7	-11.783	-19.671	1634.70613	-58.0	8.4	-82.6	32.3	11.47688	0.853	-89.8	68.5	40.1	31.5	27.5	46.52387	6-7

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JULY 31, 1964 13 HR 14 MIN 16 SEC 694 MS TAB NO 7 ATLAS PHOTO NO 7 POD SEQUENCE NO 155

TRAJECTORY DATA											
SEC TO IMPACT											
692.106 1475.21210 -4.636 -33.110 3210.667 2.060 -72.754 116.688											
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.608	-18.532	1615.21503	-56.5	8.7	-83.1	33.1	11.37881	0.830	-91.0	69.6 39.2 32.7 29.8 0. 0-1
2	-12.479	-18.617	1620.37500	-57.4	9.2	-83.0	32.6	11.37830	0.831	-90.7	69.6 39.2 33.8 29.3 26.51017 1-2
3	-11.789	-19.608	1601.09933	-58.0	8.4	-82.7	32.2	11.24093	0.852	-89.8	68.6 40.0 31.6 27.6 36.02124 2-3
4	-11.763	-17.856	1626.49281	-60.7	9.2	-83.0	30.7	11.41866	0.824	-89.8	70.3 38.4 34.5 31.0 51.95031 3-4
5	-13.271	-17.563	1662.59671	-56.7	10.1	-83.5	33.0	11.53205	0.807	-91.7	70.7 38.5 36.2 31.0 46.48684 4-5
6	-13.273	-19.351	1616.42262	-53.9	9.3	-83.0	34.6	11.34790	0.835	-91.6	69.0 40.1 33.4 27.5 52.71819 5-6
7	-11.789	-19.608	1601.09933	-58.0	8.4	-82.7	32.2	11.24093	0.852	-89.8	68.6 40.0 31.6 27.6 45.53377 6-7

JULY 31, 1964 13 HR 14 MIN 33 SEC 493 MS TAB NO 8 ATLAS PHOTO NO 8 POD SEQUENCE NO 175

TRAJECTORY DATA											
SEC TO IMPACT											
675.307 1442.11560 -4.719 -32.944 3177.571 2.067 -72.631 116.666											
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.578	-18.595	1579.41576	-56.5	8.7	-83.1	33.1	11.13786	0.830	-91.0	69.5 39.1 33.1 29.7 0. 0-1
2	-12.470	-18.589	1586.05054	-57.5	9.2	-83.0	32.5	11.13727	0.830	-90.7	69.6 39.2 33.9 29.3 27.05347 1-2
3	-11.795	-19.560	1567.14349	-58.1	8.5	-82.7	32.2	11.00254	0.851	-89.8	68.6 40.0 31.7 27.7 35.27911 2-3
4	-11.770	-17.844	1592.05232	-60.7	9.2	-83.0	30.7	11.17707	0.824	-89.8	70.3 38.4 34.6 31.0 50.87546 3-4
5	-13.246	-17.557	1607.82440	-56.7	10.1	-83.5	33.0	11.28792	0.807	-91.7	70.7 38.4 36.3 31.0 45.50572 4-5
6	-13.247	-19.308	1582.15509	-53.9	9.3	-83.0	34.5	11.10733	0.835	-91.6	69.0 40.0 33.5 27.6 51.62599 5-6
7	-11.795	-19.560	1567.14349	-58.1	8.5	-82.7	32.2	11.00254	0.851	-89.8	68.6 40.0 31.7 27.7 44.61181 6-7

JULY 31, 1964 13 HR 14 MIN 50 SEC 292 MS TAB NO 9 ATLAS PHOTO NO 9 POD SEQUENCE NO 195

TRAJECTORY DATA											
SEC TO IMPACT											
658.508 1408.91690 -4.804 -32.775 3144.372 2.075 -72.505 116.645											
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.547	-18.657	1543.48811	-56.5	8.7	-83.1	33.0	10.89518	0.830	-91.0	69.5 39.1 33.0 29.5 0. 0-1
2	-12.460	-18.569	1551.47963	-57.5	9.3	-83.1	32.5	10.89452	0.830	-90.7	69.7 39.2 33.9 29.4 27.78615 1-2
3	-11.800	-19.519	1532.95285	-58.1	8.5	-82.7	32.2	10.76249	0.851	-89.8	68.7 40.0 31.7 27.7 34.52694 2-3
4	-11.775	-17.840	1557.35899	-60.7	9.2	-83.0	30.7	10.93350	0.823	-89.8	70.3 38.4 34.6 31.1 49.78595 3-4
5	-13.219	-17.559	1572.72930	-56.8	10.1	-83.5	32.9	11.04198	0.806	-91.7	70.7 38.4 36.3 31.0 44.51618 4-5
6	-13.220	-19.272	1547.64740	-54.0	9.3	-83.1	34.5	10.86567	0.834	-91.6	69.1 40.0 33.5 27.7 50.51853 5-6
7	-11.800	-19.519	1532.95285	-58.1	8.5	-82.7	32.2	10.76249	0.851	-89.8	68.7 40.0 31.7 27.7 43.66212 6-7

JULY 31, 1964 13 HR 15 MIN 5 SEC 411 MS TAB NO 10 ATLAS PHOTO NO 10 POD SEQUENCE NO 213

TRAJECTORY DATA											
SEC TO IMPACT											
643.389 1378.94910 -4.882 -32.619 3114.404 2.083 -72.391 116.624											
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.520	-18.714	1511.04147	-56.6	8.7	-83.1	33.0	10.67569	0.829	-91.0	69.4 39.2 32.9 29.4 0. 0-1
2	-12.450	-18.552	1520.21445	-57.5	9.3	-83.1	32.5	10.67497	0.829	-90.7	69.7 39.2 34.0 29.4 28.58928 1-2
3	-11.803	-19.484	1502.03438	-58.1	8.5	-82.7	32.2	10.54542	0.850	-89.8	68.7 40.0 31.8 27.8 33.84526 2-3
4	-11.779	-17.838	1525.98224	-60.6	9.2	-83.0	30.7	10.71322	0.823	-89.8	70.3 38.4 34.6 31.1 48.79881 3-4
5	-13.193	-17.563	1541.10945	-56.8	10.1	-83.5	32.9	10.81954	0.806	-91.7	70.7 38.4 36.3 31.0 43.62056 4-5
6	-13.195	-19.242	1516.44061	-54.1	9.3	-83.1	34.4	10.64599	0.834	-91.6	69.1 40.0 33.5 27.7 49.51508 5-6
7	-11.803	-19.484	1502.03438	-58.1	8.5	-82.7	32.2	10.54542	0.850	-89.8	68.7 40.0 31.8 27.8 42.76474 6-7

JULY 31, 1964 13 HR 15 MIN 22 SEC 210 MS TAB NO 11 ATLAS PHOTO NO 11 POD SEQUENCE NO 233

TRAJECTORY DATA											
SEC TO IMPACT											
626.590 1345.55075 -4.970 -32.442 3081.006 2.091 -72.261 116.602											
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.489	-18.777	1474.86313	-56.6	8.7	-83.1	33.0	10.43057	0.829	-91.0	69.4 39.2 32.7 29.3 0. 0-1
2	-12.438	-18.537	1485.29678	-57.5	9.3	-83.1	32.5	10.42978	0.829	-90.7	69.7 39.2 34.0 29.4 29.58105 1-2
3	-11.805	-19.447	1467.50760	-58.1	8.5	-82.7	32.2	10.30302	0.850	-89.8	68.7 40.0 31.8 27.9 33.08200 2-3
4	-11.781	-17.839	1490.93919	-60.6	9.2	-83.0	30.7	10.46720	0.823	-89.8	70.3 38.4 34.6 31.1 47.69422 3-4
5	-13.163	-17.570	1505.72092	-56.8	10.1	-83.6	32.9	10.57109	0.806	-91.7	70.7 38.4 36.3 31.1 42.61958 4-5
6	-13.165	-19.211	1481.58926	-54.2	9.3	-83.1	34.3	10.40132	0.834	-91.6	69.1 40.0 33.6 27.8 48.39224 5-6
7	-11.805	-19.447	1467.50760	-58.1	8.5	-82.7	32.2	10.30302	0.850	-89.8	68.7 40.0 31.8 27.9 41.78386 6-7

JULY 31, 1964 13 HR 15 MIN 35 SEC 649 MS TAB NO 12 ATLAS PHOTO NO 12 POD SEQUENCE NO 249

TRAJECTORY DATA											
SEC TO IMPACT											
613.150 1318.75473 -5.042 -32.298 3054.210 2.097 -72.155 116.583											
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
1	-11.465	-18.827	1445.82341	-56.6	8.7	-83.1	32.9	10.23324	0.829	-91.0	69.3 39.3 32.6 29.2 0. 0-1
2	-12.424	-18.528	1457.18927	-57.6	9.3	-83.1	32.4	10.23241	0.829	-90.7	69.7 39.2 34.0 29.5 30.36950 1-2
3	-11.804	-19.421	1439.72050	-58.1	8.6	-82.7	32.1	10.10793	0.849	-89.8	68.8 40.0 31.9 27.9 32.46447 2-3
4	-11.780	-17.843	1462.73091	-60.6	9.2	-83.0	30.7	10.26916	0.823	-89.8	70.3 38.4 34.6 31.1 46.80239 3-4
5	-13.136	-17.579	1477.22852	-56.9	10.1	-83.6	32.8	10.37166	0.806	-91.7	70.7 38.4 36.3 31.1 41.81155 4-5
6	-13.138	-19.189	1453.53520	-54.2	9.3	-83.1	34.3	10.20437	0.833	-91.6	69.1 40.0 33.6 27.8 47.48537 5-6
7	-11.804	-19.421	1439.72050	-58.1	8.6	-82.7	32.1	10.10793	0.849	-89.8	68.8 40.0 31.9 27.9 40.99268 6-7

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JULY 31, 1964 13 HR 15 MIN 50 SEC 768 MS

TAB NO 13 ATLAS PHOTO NO 13 POD SEQUENCE NO 267

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				598.031	1288.52545	-5.124	-32.133	3023.981	2.105	-72.034	116.562

PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.438	-18.883	1413.04857	-56.7	8.7	-83.1	32.9	10.01000	0.829	-91.0	69.3 39.4 32.5	29.1	0- 1
2	-12.405	-18.520	1425.39166	-57.6	9.3	-83.1	32.4	10.00912	0.829	-90.7	69.7 39.2 34.0	29.5	31.21342 1- 2
3	-11.798	-19.355	1408.29076	-58.2	8.6	-82.7	32.1	9.88727	0.849	-89.8	68.8 40.0 31.9	27.9	31.76315 2- 3
4	-11.775	-17.850	1430.82178	-60.6	9.2	-83.0	30.7	10.04514	0.823	-89.8	70.3 38.3 34.7	31.1	45.79219 3- 4
5	-13.102	-17.592	1444.98979	-56.9	10.1	-83.6	32.8	10.14672	0.807	-91.7	70.7 38.4 36.3	31.1	40.89466 4- 5
6	-13.103	-19.167	1421.79559	-54.3	9.3	-83.1	34.2	9.98154	0.833	-91.6	69.2 40.0 33.6	27.8	46.45774 5- 6
7	-11.798	-19.395	1408.29076	-58.2	8.6	-82.7	32.1	9.88727	0.849	-89.8	68.8 40.0 31.9	27.9	40.09480 6- 7

JULY 31, 1964 13 HR 16 MIN 7 SEC 567 MS

TAB NO 14 ATLAS PHOTO NO 14 POD SEQUENCE NO 287

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				581.232	1254.83170	-5.218	-31.945	2990.287	2.114	-71.897	116.537

PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.408	-18.946	1376.49960	-56.8	8.6	-83.1	32.8	9.76035	0.829	-91.0	69.2 39.4 32.4	29.0	0- 1
2	-12.381	-18.516	1389.83333	-57.7	9.3	-83.1	32.3	9.75943	0.829	-90.7	69.7 39.1 34.0	29.5	32.10818 1- 2
3	-11.789	-19.369	1373.15028	-58.2	8.6	-82.7	32.0	9.64055	0.849	-89.8	68.8 39.9 31.9	28.0	30.97541 2- 3
4	-11.766	-17.863	1395.13896	-60.7	9.2	-83.0	30.7	9.79463	0.823	-89.8	70.3 38.3 34.6	31.1	44.65954 3- 4
5	-13.059	-17.612	1408.93173	-57.0	10.1	-83.6	32.7	9.89157	0.807	-91.7	70.7 38.4 36.2	31.1	39.86681 4- 5
6	-13.061	-19.147	1386.30219	-54.4	9.3	-83.2	34.1	9.73237	0.833	-91.6	69.2 40.0 33.6	27.9	45.30527 5- 6
7	-11.789	-19.369	1373.15028	-58.2	8.6	-82.7	32.0	9.64055	0.849	-89.8	68.8 39.9 31.9	28.0	39.08869 6- 7

JULY 31, 1964 13 HR 16 MIN 22 SEC 686 MS

TAB NO 15 ATLAS PHOTO NO 15 POD SEQUENCE NO 305

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				566.111	1224.41074	-5.303	-31.772	2959.866	2.122	-71.771	116.515

PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.355	-18.519	1357.58473	-57.7	9.3	-83.1	32.3	9.53298	0.829	-90.7	69.7 39.1 34.0	29.5	0- 1
3	-11.777	-19.352	1341.28883	-58.3	8.6	-82.7	32.0	9.41686	0.849	-89.8	68.8 39.9 32.0	28.0	30.25664 2- 3
4	-11.755	-17.881	1362.77534	-60.7	9.2	-83.0	30.7	9.56742	0.823	-89.8	70.3 38.3 34.6	31.1	43.62724 3- 4
5	-13.018	-17.636	1376.22142	-57.0	10.0	-83.6	32.7	9.64193	0.807	-91.7	70.6 38.3 36.2	31.0	38.93249 4- 5
6	-13.020	-19.136	1354.11465	-54.4	9.3	-83.2	34.0	9.50640	0.833	-91.6	69.2 40.0 33.6	27.9	44.25663 5- 6
7	-11.777	-19.352	1341.28883	-58.3	8.6	-82.7	32.0	9.41686	0.849	-89.8	68.8 39.9 32.0	28.0	38.17441 6- 7

JULY 31, 1964 13 HR 16 MIN 34 SEC 445 MS

TAB NO 16 ATLAS PHOTO NO 16 POD SEQUENCE NO 319

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				554.354	1200.68585	-5.371	-31.635	2936.141	2.128	-71.672	116.497

PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.333	-18.524	1332.36159	-57.8	9.2	-83.1	32.2	9.35587	0.829	-90.7	69.7 39.1 34.0	29.5	0- 1
3	-11.766	-19.341	1316.37233	-58.3	8.6	-82.7	32.0	9.24193	0.849	-89.8	68.9 39.9 32.0	28.0	29.69240 2- 3
4	-11.744	-17.898	1337.46318	-60.7	9.2	-83.0	30.7	9.38971	0.823	-89.8	70.3 38.3 34.6	31.1	42.81856 3- 4
5	-12.984	-17.658	1350.63333	-57.1	10.0	-83.6	32.6	9.48228	0.808	-91.7	70.6 38.3 36.2	31.0	38.19990 4- 5
6	-12.985	-19.129	1328.93848	-54.6	9.3	-83.2	33.9	9.32965	0.833	-91.6	69.2 39.9 33.6	27.9	43.41136 5- 6
7	-11.766	-19.341	1316.37233	-58.3	8.6	-82.7	32.0	9.24193	0.849	-89.8	68.9 39.9 32.0	28.0	37.45770 6- 7

JULY 31, 1964 13 HR 16 MIN 46 SEC 205 MS

TAB NO 17 ATLAS PHOTO NO 17 POD SEQUENCE NO 333

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				542.595	1176.90372	-5.440	-31.496	2912.359	2.134	-71.571	116.479

PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.309	-18.531	1307.01958	-57.8	9.2	-83.1	32.2	9.17791	0.829	-90.7	69.7 39.1 34.0	29.5	0- 1
3	-11.752	-19.333	1291.34100	-58.4	8.5	-82.7	31.9	9.06619	0.849	-89.8	68.9 39.9 32.0	28.0	29.12417 2- 3
4	-11.732	-17.916	1312.03185	-60.7	9.2	-83.0	30.6	9.21117	0.823	-89.8	70.2 38.3 34.6	31.1	42.00482 3- 4
5	-12.947	-17.682	1324.92220	-57.1	10.0	-83.6	32.6	9.30177	0.808	-91.7	70.6 38.3 36.1	31.0	37.46304 4- 5
6	-12.948	-19.125	1303.64374	-54.6	9.3	-83.2	33.9	9.15207	0.833	-91.6	69.2 39.9 33.6	27.9	42.60284 5- 6
7	-11.752	-19.333	1291.34100	-58.4	8.5	-82.7	31.9	9.06619	0.849	-89.8	68.9 39.9 32.0	28.0	36.73697 6- 7

JULY 31, 1964 13 HR 17 MIN 3 SEC 4 MS

TAB NO 18 ATLAS PHOTO NO 18 POD SEQUENCE NO 353

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				525.796	1142.82834	-5.541	-31.293	2878.284	2.144	-71.424	116.452

PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-12.274	-18.550	1270.55151	-57.9	9.2	-83.1	32.1	8.92183	0.830	-90.7	69.7 39.1 33.9	29.5	0- 1
3	-11.733	-19.329	1255.32745	-58.4	8.5	-82.8	31.8	8.81335	0.849	-89.8	68.9 39.9 32.0	28.0	28.30245 2- 3
4	-11.713	-17.952	1275.42841	-60.7	9.2	-83.0	30.6	8.95420	0.824	-89.8	70.2 38.3 34.6	31.1	40.82683 3- 4
5	-12.894	-17.725	1287.91577	-57.2	9.9	-83.6	32.5	9.04197	0.809	-91.7	70.5 38.3 36.1	31.0	36.40240 4- 5
6	-12.895	-19.128	1267.25096	-54.7	9.2	-83.2	33.7	8.89658	0.834	-91.6	69.2 39.9 33.5	27.9	41.40347 5- 6
7	-11.733	-19.329	1255.32745	-58.4	8.5	-82.8	31.8	8.81335	0.849	-89.8	68.9 39.9 32.0	28.0	35.69977 6- 7

RA-VII CAMERA P2

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JULY 31, 1964 13 HR 17 MIN 16 SEC 443 MS TAB NO 19 ATLAS PHOTO NO 19 POD SEQUENCE NO 369

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				512.356	1115.48181	-5.623	-31.127	2850.937	2.151	-71.305	116.430		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS	ALPHA SCALE	PT-PT
2	-12.246	-18.572	1241.16365	-57.9	9.2	-83.1	32.1	8.71547	0.830	-90.7	69.7 39.1 33.9	29.5 0.	1- 2
3	-11.718	-19.332	1226.31091	-58.5	8.5	-82.8	31.8	8.60963	0.849	-89.8	68.9 39.9 31.9	28.0 27.63768	2- 3
4	-11.698	-17.988	1245.92621	-60.8	9.1	-83.0	30.6	8.74707	0.824	-89.8	70.2 38.3 34.5	31.0 39.87247	3- 4
5	-12.852	-17.767	1258.08939	-57.2	9.9	-83.6	32.4	8.83257	0.809	-91.7	70.5 38.4 36.0	30.9 35.54782	4- 5
6	-12.853	-19.136	1237.92940	-54.8	9.2	-83.2	33.7	8.69073	0.834	-91.6	69.2 40.0 33.5	27.9 40.43179	5- 6
7	-11.718	-19.332	1226.31091	-58.5	8.5	-82.8	31.8	8.60963	0.849	-89.8	68.9 39.9 31.9	28.0 34.86446	6- 7

JULY 31, 1964 13 HR 17 MIN 28 SEC 202 MS TAB NO 20 ATLAS PHOTO NO 20 POD SEQUENCE NO 383

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				500.597	1091.48935	-5.696	-30.979	2826.945	2.158	-71.198	116.410		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS	ALPHA SCALE	PT-PT
2	-12.222	-18.589	1219.40363	-58.0	9.1	-83.2	32.0	8.53458	0.830	-90.7	69.6 39.1 33.9	29.5 0.	1- 2
3	-11.705	-19.333	1200.87187	-58.5	8.5	-82.8	31.8	8.43103	0.849	-89.8	68.9 39.9 31.9	28.0 27.05700	2- 3
4	-11.686	-17.801	1220.06683	-60.8	9.1	-83.0	30.6	8.55553	0.825	-89.8	70.1 38.3 34.5	31.0 39.03856	3- 4
5	-12.815	-17.801	1231.94939	-57.3	9.8	-83.6	32.4	8.64905	0.810	-91.7	70.5 38.4 35.9	30.9 34.79993	4- 5
6	-12.816	-19.142	1212.22603	-54.9	9.2	-83.3	33.6	8.51029	0.834	-91.6	69.2 40.0 33.5	27.9 39.58305	5- 6
7	-11.705	-19.333	1200.87187	-58.5	8.5	-82.8	31.8	8.43103	0.849	-89.8	68.9 39.9 31.9	28.0 34.13311	6- 7

JULY 31, 1964 13 HR 17 MIN 41 SEC 641 MS TAB NO 21 ATLAS PHOTO NO 21 POD SEQUENCE NO 399

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				487.158	1063.99500	-5.781	-30.807	2799.450	2.166	-71.075	116.387		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS	ALPHA SCALE	PT-PT
2	-12.195	-18.615	1185.76859	-58.0	9.1	-83.2	32.0	8.32649	0.831	-90.7	69.6 39.2 33.8	29.4 0.	1- 2
3	-11.691	-19.340	1171.61197	-58.5	8.5	-82.8	31.8	8.22560	0.849	-89.8	68.9 40.0 31.9	28.0 26.38655	2- 3
4	-11.672	-18.057	1190.31302	-60.8	9.1	-83.0	30.6	8.35664	0.825	-89.8	70.1 38.3 34.4	30.9 38.07413	3- 4
5	-12.774	-17.848	1201.67431	-57.3	9.8	-83.6	32.4	8.43790	0.811	-91.7	70.4 38.4 35.9	30.8 33.96019	4- 5
6	-12.775	-19.154	1182.66362	-54.9	9.1	-83.3	33.6	8.30275	0.835	-91.6	69.1 40.0 33.4	27.9 38.60155	5- 6
7	-11.691	-19.340	1171.61197	-58.5	8.5	-82.8	31.8	8.22560	0.849	-89.8	68.9 40.0 31.9	28.0 33.29255	6- 7

JULY 31, 1964 13 HR 17 MIN 53 SEC 401 MS TAB NO 22 ATLAS PHOTO NO 22 POD SEQUENCE NO 413

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				475.399	1039.87137	-5.857	-30.654	2775.327	2.173	-70.965	116.367		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS	ALPHA SCALE	PT-PT
2	-12.171	-18.637	1159.75629	-58.0	9.1	-83.2	32.0	8.14383	0.831	-90.7	69.6 39.2 33.8	29.4 0.	1- 2
3	-11.678	-19.346	1145.92676	-58.5	8.5	-82.8	31.7	8.04527	0.849	-89.8	68.8 40.0 31.9	28.0 25.79893	2- 3
4	-11.660	-18.092	1164.19696	-60.8	9.1	-83.0	30.6	8.17329	0.826	-89.8	70.1 38.4 34.4	30.9 37.22886	3- 4
5	-12.737	-17.887	1175.47768	-57.3	9.8	-83.6	32.3	8.25258	0.811	-91.7	70.4 38.4 35.8	30.8 33.18596	4- 5
6	-12.738	-19.165	1156.71399	-55.0	9.1	-83.3	33.5	8.12057	0.835	-91.6	69.1 40.0 33.4	27.9 37.74153	5- 6
7	-11.678	-19.346	1145.92676	-58.5	8.5	-82.8	31.7	8.04527	0.849	-89.8	68.8 40.0 31.9	28.0 32.55497	6- 7

JULY 31, 1964 13 HR 18 MIN 3 SEC 480 MS TAB NO 23 ATLAS PHOTO NO 23 POD SEQUENCE NO 425

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				465.319	1019.14432	-5.923	-30.520	2754.600	2.179	-70.869	116.349		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS	ALPHA SCALE	PT-PT
2	-12.150	-18.657	1137.37056	-58.0	9.1	-83.2	32.0	7.98664	0.831	-90.7	69.6 39.2 33.8	29.4 0.	1- 2
3	-11.666	-19.353	1123.82323	-58.6	8.4	-82.8	31.7	7.89009	0.849	-89.8	68.8 40.0 31.9	28.0 25.29290	2- 3
4	-11.648	-18.122	1141.72240	-60.8	9.1	-83.0	30.6	8.01551	0.826	-89.8	70.0 38.4 34.3	30.8 36.50126	3- 4
5	-12.704	-17.923	1152.76085	-57.4	9.7	-83.6	32.3	8.09369	0.812	-91.7	70.3 38.4 35.8	30.7 32.53669	4- 5
6	-12.705	-19.175	1134.38200	-55.0	9.1	-83.3	33.5	7.96380	0.836	-91.6	69.1 40.0 33.3	27.8 37.00135	5- 6
7	-11.666	-19.353	1123.82323	-58.6	8.4	-82.8	31.7	7.89009	0.849	-89.8	68.8 40.0 31.9	28.0 31.92004	6- 7

JULY 31, 1964 13 HR 18 MIN 16 SEC 919 MS TAB NO 24 ATLAS PHOTO NO 24 POD SEQUENCE NO 441

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				451.880	991.43570	-6.013	-30.338	2726.891	2.187	-70.739	116.324		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS	ALPHA SCALE	PT-PT
2	-12.117	-18.687	1107.37885	-58.1	9.0	-83.2	31.9	7.77603	0.832	-90.7	69.5 39.2 33.7	29.3 0.	1- 2
3	-11.648	-19.363	1094.21138	-58.6	8.4	-82.8	31.7	7.68219	0.850	-89.8	68.8 40.0 31.8	28.0 24.61402	2- 3
4	-11.631	-18.166	1111.61168	-60.8	9.0	-83.0	30.6	7.80412	0.827	-89.8	70.0 38.4 34.3	30.8 35.52592	3- 4
5	-12.659	-17.973	1122.32420	-57.4	9.7	-83.6	32.3	7.87941	0.813	-91.7	70.3 38.4 35.7	30.7 31.66636	4- 5
6	-12.660	-19.191	1104.46263	-55.1	9.0	-83.3	33.4	7.75375	0.836	-91.6	69.1 40.0 33.3	27.8 36.00888	5- 6
7	-11.648	-19.363	1094.21138	-58.6	8.4	-82.8	31.7	7.68219	0.850	-89.8	68.8 40.0 31.8	28.0 31.06889	6- 7

RA-VII CAPEKA P2

5

TAB NO 25															ATLAS PHOTO NO 25					POD SEQUENCE NO 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RA-VII CAMERA P2

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TAB NO 31 ATLAS PHOTO NO 31 POD SEQUENCE NO 525														
JULY 31, 1964 13 HR 19 MIN 27 SEC 475 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ	
PHOTO DATA					381.324		844.55569	-6.513	-29.318	2580.011	2.234	-70.017	116.184	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.950	-18.866	947.62968	-58.2	8.8	-83.2	31.8	6.65427	0.835	-90.7	69.4	39.3	33.4	29.1
3	-11.547	-19.442	936.47860	-58.7	8.3	-82.8	31.6	6.57479	0.852	-89.8	68.8	40.1	31.6	27.8
4	-11.532	-18.420	951.72491	-60.8	8.9	-83.0	30.6	6.67812	0.830	-89.8	69.8	38.5	33.9	30.5
5	-12.411	-18.259	960.22635	-57.6	9.4	-83.7	32.1	6.74138	0.817	-91.7	70.0	38.5	35.2	30.3
6	-12.412	-19.298	945.11177	-55.4	8.8	-83.4	33.0	6.63505	0.839	-91.6	69.0	40.1	33.0	27.7
7	-11.547	-19.442	936.47860	-58.7	8.3	-82.8	31.6	6.57479	0.852	-89.8	68.8	40.1	31.6	27.8
TAB NO 32 ATLAS PHOTO NO 32 POD SEQUENCE NO 537														
JULY 31, 1964 13 HR 19 MIN 37 SEC 555 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ	
PHOTO DATA					371.245		823.37195	-6.589	-29.162	2558.827	2.241	-69.908	116.162	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.923	-18.890	924.52537	-58.3	8.8	-83.2	31.7	6.49203	0.835	-90.6	69.3	39.3	33.3	29.0
3	-11.530	-19.452	913.66237	-58.8	8.3	-82.8	31.5	6.41460	0.852	-89.8	68.7	40.1	31.6	27.8
4	-11.515	-18.456	928.03251	-60.8	8.8	-83.0	30.6	6.51530	0.830	-89.8	69.7	38.5	33.9	30.4
5	-12.372	-18.299	936.78799	-57.6	9.4	-83.7	32.0	6.57683	0.818	-91.7	69.9	38.5	35.2	30.3
6	-12.373	-19.312	922.06226	-55.5	8.8	-83.4	33.0	6.47324	0.839	-91.6	69.0	40.1	33.0	27.6
7	-11.530	-19.452	913.66237	-58.8	8.3	-82.8	31.5	6.41460	0.852	-89.8	68.7	40.1	31.6	27.8
TAB NO 33 ATLAS PHOTO NO 33 POD SEQUENCE NO 547														
JULY 31, 1964 13 HR 19 MIN 45 SEC 954 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ	
PHOTO DATA					362.845		805.67874	-6.653	-29.030	2541.134	2.247	-69.815	116.144	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.899	-18.910	905.22949	-58.3	8.8	-83.2	31.7	6.35654	0.836	-90.6	69.3	39.3	33.3	29.0
3	-11.515	-19.460	894.60545	-58.8	8.3	-82.9	31.5	6.28081	0.852	-89.8	68.7	40.1	31.6	27.8
4	-11.501	-18.485	908.66415	-60.8	8.8	-83.0	30.6	6.37932	0.831	-89.8	69.7	38.5	33.8	30.4
5	-12.340	-18.332	917.71528	-57.7	9.4	-83.7	32.0	6.43942	0.818	-91.7	69.9	38.5	35.1	30.2
6	-12.341	-19.323	902.81135	-55.5	8.8	-83.4	32.9	6.33809	0.840	-91.6	69.0	40.1	32.9	27.6
7	-11.515	-19.460	894.60545	-58.8	8.3	-82.9	31.5	6.28081	0.852	-89.8	68.7	40.1	31.6	27.8
TAB NO 34 ATLAS PHOTO NO 34 POD SEQUENCE NO 555														
JULY 31, 1964 13 HR 19 MIN 52 SEC 674 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ	
PHOTO DATA					356.126		791.49768	6.705	-28.924	2526.953	2.251	-69.741	116.129	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.881	-18.924	889.78660	-58.3	8.8	-83.2	31.7	6.24810	0.836	-90.6	69.3	39.3	33.3	29.0
3	-11.503	-19.465	879.35145	-58.8	8.3	-82.9	31.5	6.17371	0.852	-89.8	68.7	40.1	31.6	27.8
4	-11.489	-18.506	893.16467	-60.9	8.8	-83.0	30.5	6.27051	0.831	-89.8	69.7	38.5	33.8	30.4
5	-12.314	-18.356	901.55366	-57.7	9.3	-83.7	31.9	6.32946	0.819	-91.7	69.9	38.5	35.1	30.2
6	-12.315	-19.330	887.40327	-55.6	8.7	-83.5	32.9	6.22992	0.840	-91.6	68.9	40.1	32.9	27.6
7	-11.503	-19.465	879.35145	-58.8	8.3	-82.9	31.5	6.17371	0.852	-89.8	68.7	40.1	31.6	27.8
TAB NO 35 ATLAS PHOTO NO 35 POD SEQUENCE NO 567														
JULY 31, 1964 13 HR 20 MIN 2 SEC 753 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ	
PHOTO DATA					346.046		770.18231	-6.784	-28.761	2505.638	2.259	-69.627	116.106	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.853	-18.949	866.51098	-58.4	8.7	-83.2	31.6	6.08466	0.836	-90.6	69.3	39.3	33.2	29.0
3	-11.485	-19.475	856.36243	-58.9	8.2	-82.9	31.4	6.01231	0.852	-89.8	68.7	40.1	31.5	27.8
4	-11.472	-18.541	869.80161	-60.9	8.8	-83.0	30.5	6.10649	0.831	-89.7	69.6	38.5	33.8	30.3
5	-12.274	-18.396	877.94671	-57.8	9.3	-83.7	31.9	6.16373	0.819	-91.6	69.8	38.5	35.0	30.2
6	-12.275	-19.344	864.18246	-55.7	8.7	-83.5	32.8	6.06690	0.840	-91.6	68.9	40.1	32.9	27.6
7	-11.485	-19.475	856.36243	-58.9	8.2	-82.9	31.4	6.01231	0.852	-89.8	68.7	40.1	31.5	27.8
TAB NO 36 ATLAS PHOTO NO 36 POD SEQUENCE NO 575														
JULY 31, 1964 13 HR 20 MIN 9 SEC 473 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ	
PHOTO DATA					339.327		755.94211	-6.838	-28.651	2491.397	2.264	-69.550	116.090	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.835	-18.968	850.90658	-58.4	8.7	-83.2	31.6	5.97508	0.837	-90.6	69.3	39.3	33.2	29.0
3	-11.473	-19.484	840.95208	-58.9	8.2	-82.9	31.4	5.90412	0.853	-89.8	68.7	40.1	31.5	27.8
4	-11.460	-18.568	854.13670	-60.9	8.8	-83.0	30.5	5.99651	0.832	-89.7	69.6	38.5	33.7	30.3
5	-12.248	-18.426	862.11839	-57.8	9.3	-83.7	31.9	6.05260	0.820	-91.6	69.8	38.5	35.0	30.2
6	-12.249	-19.356	848.61691	-55.7	8.7	-83.5	32.8	5.95762	0.840	-91.6	68.9	40.1	32.8	27.6
7	-11.473	-19.484	840.95208	-58.9	8.2	-82.9	31.4	5.90412	0.853	-89.8	68.7	40.1	31.5	27.8

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JULY 31, 1964 13 HR 20 MIN 16 SEC 192 MS

TAB NO 37 ATLAS PHOTO NO 37 POD SEQUENCE NO 583

TRAJECTORY DATA SEC TO IMPACT 332.607 ALT 741.67783 LAT -6.892 LCN -28.540 R 2477.133 V 2.269 PTH -69.473 AZ 116.074

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.816	-18.987	835.26871	-58.4	8.7	-83.2	31.6	5.86527	0.837	-90.6	69.2	39.3	33.2	28.9	0.	1-2
3	-11.461	-19.494	825.50801	-58.9	8.2	-82.9	31.4	5.79569	0.853	-89.8	68.7	40.1	31.5	27.8	18.47600	2-3
4	-11.443	-18.595	838.43803	-60.9	8.7	-83.0	30.5	5.88630	0.832	-89.7	69.6	38.5	33.7	30.3	26.70317	3-4
5	-12.222	-18.455	846.25703	-57.8	9.3	-83.7	31.8	5.94125	0.820	-91.6	69.8	38.5	34.9	30.1	23.79406	4-5
6	-12.223	-19.369	833.01821	-55.7	8.7	-83.5	32.7	5.84811	0.841	-91.6	68.9	40.1	32.8	27.6	27.04113	5-6
7	-11.461	-19.494	825.50801	-58.9	8.2	-82.9	31.4	5.79569	0.853	-89.8	68.7	40.1	31.5	27.8	23.36348	6-7

TAB NO 38 ATLAS PHOTO NO 38 POD SEQUENCE NO 591

JULY 31, 1964 13 HR 20 MIN 22 SEC 912 MS

TRAJECTORY DATA SEC TO IMPACT 325.888 ALT 727.38901 LAT -6.946 LCN -28.427 R 2462.844 V 2.274 PTH -69.395 AZ 116.058

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.798	-19.007	819.59982	-58.4	8.7	-83.2	31.6	5.75524	0.837	-90.6	69.2	39.3	33.1	28.9	0.	1-2
3	-11.449	-19.504	810.03245	-58.9	8.2	-82.9	31.4	5.68704	0.853	-89.7	68.7	40.1	31.5	27.7	18.12410	2-3
4	-11.437	-18.621	822.70806	-60.9	8.7	-83.0	30.5	5.77586	0.833	-89.7	69.6	38.5	33.7	30.3	26.19659	3-4
5	-12.196	-18.455	830.36546	-57.8	9.2	-83.7	31.8	5.82968	0.820	-91.6	69.8	38.5	34.9	30.1	23.34256	4-5
6	-12.197	-19.381	817.38898	-55.8	8.6	-83.5	32.7	5.73839	0.841	-91.6	68.9	40.1	32.8	27.6	26.52676	5-6
7	-11.449	-19.504	810.03245	-58.9	8.2	-82.9	31.4	5.68704	0.853	-89.7	68.7	40.1	31.5	27.7	22.92124	6-7

TAB NO 39 ATLAS PHOTO NO 39 POD SEQUENCE NO 599

JULY 31, 1964 13 HR 20 MIN 29 SEC 631 MS

TRAJECTORY DATA SEC TO IMPACT 319.168 ALT 713.07556 LAT -7.002 LCN -28.314 R 2448.531 V 2.279 PTH -69.315 AZ 116.041

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.779	-19.026	803.89798	-58.5	8.7	-83.2	31.5	5.64499	0.838	-90.6	69.2	39.3	33.1	28.9	0.	1-2
3	-11.437	-19.513	794.52366	-59.0	8.2	-82.9	31.3	5.57816	0.853	-89.7	68.7	40.1	31.5	27.7	17.77186	2-3
4	-11.425	-18.648	806.94530	-60.9	8.7	-83.0	30.5	5.66520	0.833	-89.7	69.5	38.5	33.6	30.2	25.68944	3-4
5	-12.169	-18.515	814.44140	-57.9	9.2	-83.7	31.8	5.71788	0.821	-91.6	69.7	38.5	34.8	30.1	22.89040	4-5
6	-12.170	-19.393	801.72678	-55.8	8.6	-83.5	32.6	5.62844	0.841	-91.6	68.9	40.1	32.7	27.5	26.01186	5-6
7	-11.437	-19.513	794.52366	-59.0	8.2	-82.9	31.3	5.57816	0.853	-89.7	68.7	40.1	31.5	27.7	22.47830	6-7

TAB NO 40 ATLAS PHOTO NO 40 POD SEQUENCE NO 607

JULY 31, 1964 13 HR 20 MIN 36 SEC 351 MS

TRAJECTORY DATA SEC TO IMPACT 312.448 ALT 698.73734 LAT -7.057 LCN -28.198 R 2434.193 V 2.284 PTH -69.235 AZ 116.025

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.760	-19.043	788.70261	-58.5	8.7	-83.3	31.5	5.53477	0.838	-90.6	69.2	39.3	33.1	28.9	0.	1-2
3	-11.426	-19.520	779.01838	-59.0	8.2	-82.9	31.3	5.46930	0.853	-89.7	68.7	40.1	31.5	27.7	17.42122	2-3
4	-11.413	-18.672	791.19043	-60.9	8.7	-83.0	30.5	5.55460	0.833	-89.7	69.5	38.5	33.6	30.2	25.18478	3-4
5	-12.143	-18.542	798.52726	-57.9	9.2	-83.7	31.8	5.60616	0.821	-91.6	69.7	38.5	34.8	30.0	22.43887	4-5
6	-12.144	-19.403	786.06934	-55.9	8.6	-83.5	32.6	5.51852	0.842	-91.6	68.9	40.1	32.7	27.5	25.49965	5-6
7	-11.426	-19.520	779.01838	-59.0	8.2	-82.9	31.3	5.46930	0.853	-89.7	68.7	40.1	31.5	27.7	22.03565	6-7

TAB NO 41 ATLAS PHOTO NO 41 POD SEQUENCE NO 617

JULY 31, 1964 13 HR 20 MIN 44 SEC 751 MS

TRAJECTORY DATA SEC TO IMPACT 304.049 ALT 680.77933 LAT -7.128 LCN -28.052 R 2416.235 V 2.291 PTH -69.134 AZ 116.003

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.737	-19.063	768.53216	-58.5	8.6	-83.3	31.5	5.39665	0.838	-90.6	69.2	39.3	33.1	28.9	0.	1-2
3	-11.411	-19.529	759.58546	-59.0	8.2	-82.9	31.3	5.33286	0.853	-89.7	68.7	40.1	31.4	27.7	16.98210	2-3
4	-11.399	-18.702	771.44682	-60.9	8.7	-83.0	30.5	5.41598	0.833	-89.7	69.5	38.5	33.6	30.2	24.55279	3-4
5	-12.110	-18.575	778.58371	-57.9	9.2	-83.7	31.7	5.46614	0.822	-91.6	69.7	38.5	34.8	30.0	21.87327	4-5
6	-12.111	-19.415	766.44643	-55.9	8.6	-83.5	32.5	5.38076	0.842	-91.6	68.8	40.1	32.7	27.5	24.85823	5-6
7	-11.411	-19.529	759.58546	-59.0	8.2	-82.9	31.3	5.33286	0.853	-89.7	68.7	40.1	31.4	27.7	21.48137	6-7

TAB NO 42 ATLAS PHOTO NO 42 POD SEQUENCE NO 623

JULY 31, 1964 13 HR 20 MIN 49 SEC 790 MS

TRAJECTORY DATA SEC TO IMPACT 299.009 ALT 669.98560 LAT -7.171 LCN -27.964 R 2405.441 V 2.295 PTH -69.073 AZ 115.990

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.723	-19.073	756.73969	-58.6	8.6	-83.3	31.4	5.31384	0.838	-90.6	69.1	39.3	33.0	28.9	0.	1-2
3	-11.402	-19.532	747.93301	-59.0	8.2	-82.9	31.2	5.25106	0.853	-89.7	68.7	40.1	31.4	27.7	16.72012	2-3
4	-11.390	-18.717	759.61206	-61.0	8.7	-83.0	30.5	5.33290	0.834	-89.7	69.5	38.5	33.5	30.2	24.17595	3-4
5	-12.090	-18.593	766.63028	-58.0	9.1	-83.7	31.7	5.38222	0.822	-91.6	69.6	38.5	34.7	30.0	21.53477	4-5
6	-12.091	-19.419	754.68076	-56.0	8.6	-83.5	32.5	5.29816	0.842	-91.6	68.8	40.1	32.7	27.5	24.47593	5-6
7	-11.402	-19.532	747.93301	-59.0	8.2	-82.9	31.2	5.25106	0.853	-89.7	68.7	40.1	31.4	27.7	21.14917	6-7

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JULY 31, 1964 13 HR 20 MIN 56 SEC 510 MS TAB NO 43 ATLAS PHOTO NO 43 POD SEQUENCE NO 631

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				292.290	655.57178	-7.229	-27.844	2391.027	2.300	-68.990	115.973			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.704	-19.087	740.97564	-58.6	8.6	-83.3	31.4	5.20314	0.838	-90.6	69.1 39.3 33.0	28.9	0.	1- 2
3	-11.389	-19.536	732.35618	-59.1	8.1	-82.9	31.2	5.14169	0.853	-89.7	68.7 40.1 31.4	27.7	16.36983	2- 3
4	-11.378	-18.739	743.79126	-61.0	8.7	-83.0	30.4	5.22183	0.834	-89.7	69.4 38.5 33.5	30.2	23.67208	3- 4
5	-12.063	-18.617	750.65116	-58.0	9.1	-83.7	31.6	5.27004	0.822	-91.6	69.6 38.5 34.7	30.0	21.08200	4- 5
6	-12.064	-19.426	738.95288	-56.0	8.6	-83.5	32.4	5.18774	0.842	-91.6	68.8 40.1 32.7	27.5	23.96470	5- 6
7	-11.389	-19.536	732.35618	-59.1	8.1	-82.9	31.2	5.14169	0.853	-89.7	68.7 40.1 31.4	27.7	20.70516	6- 7

JULY 31, 1964 13 HR 21 MIN 1 SEC 550 MS TAB NO 44 ATLAS PHOTO NO 44 POD SEQUENCE NO 637

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				287.250	644.74438	-7.273	-27.753	2380.200	2.304	-68.927	115.959			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.690	-19.100	729.10233	-58.6	8.6	-83.3	31.4	5.11977	0.839	-90.6	69.1 39.3 33.0	28.9	0.	1- 2
3	-11.380	-19.541	720.62484	-59.1	8.1	-82.9	31.2	5.05933	0.853	-89.7	68.7 40.1 31.4	27.7	16.10556	2- 3
4	-11.369	-18.757	731.87373	-61.0	8.7	-83.0	30.4	5.13816	0.834	-89.7	69.4 38.5 33.5	30.1	23.29139	3- 4
5	-12.043	-18.637	738.61497	-58.0	9.1	-83.7	31.6	5.18553	0.822	-91.6	69.6 38.5 34.7	30.0	20.74131	4- 5
6	-12.044	-19.433	727.10834	-56.0	8.5	-83.5	32.3	5.10459	0.842	-91.6	68.8 40.1 32.7	27.5	23.57851	5- 6
7	-11.380	-19.541	720.62484	-59.1	8.1	-82.9	31.2	5.05933	0.853	-89.7	68.7 40.1 31.4	27.7	20.37097	6- 7

JULY 31, 1964 13 HR 21 MIN 9 SEC 949 MS TAB NO 45 ATLAS PHOTO NO 45 POD SEQUENCE NO 647

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				278.850	626.66656	-7.347	-27.600	2362.122	2.311	-68.822	115.937			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.665	-19.123	709.22968	-58.7	8.6	-83.3	31.3	4.98022	0.839	-90.6	69.1 39.3 33.0	28.8	0.	1- 2
3	-11.365	-19.552	700.99107	-59.1	8.1	-82.9	31.2	4.92149	0.854	-89.7	68.6 40.1 31.4	27.7	15.66253	2- 3
4	-11.354	-18.789	711.92519	-61.0	8.6	-83.0	30.4	4.97811	0.834	-89.7	69.4 38.5 33.5	30.1	22.65269	3- 4
5	-12.010	-18.673	718.46875	-58.1	9.1	-83.7	31.6	5.04409	0.823	-91.6	69.6 38.5 34.6	29.9	20.11120	4- 5
6	-12.011	-19.447	707.28599	-56.1	8.5	-83.5	32.3	4.96543	0.842	-91.6	68.8 40.1 32.6	27.5	22.93062	5- 6
7	-11.365	-19.552	700.99107	-59.1	8.1	-82.9	31.2	4.92149	0.854	-89.7	68.6 40.1 31.4	27.7	19.81207	6- 7

JULY 31, 1964 13 HR 21 MIN 16 SEC 669 MS TAB NO 46 ATLAS PHOTO NO 46 POD SEQUENCE NO 655

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				272.131	612.17465	-7.406	-27.476	2347.630	2.316	-68.736	115.918			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.647	-19.142	693.28670	-58.7	8.6	-83.3	31.3	4.86827	0.839	-90.6	69.1 39.3 33.0	28.8	0.	1- 2
3	-11.353	-19.561	685.23920	-59.2	8.1	-82.9	31.1	4.81090	0.854	-89.7	68.6 40.1 31.4	27.7	15.30732	2- 3
4	-11.342	-18.816	695.92158	-61.0	8.6	-83.0	30.4	4.88576	0.834	-89.7	69.4 38.5 33.5	30.1	22.14066	3- 4
5	-11.983	-18.702	702.30710	-58.1	9.1	-83.7	31.6	4.93063	0.823	-91.6	69.5 38.5 34.6	29.9	19.71409	4- 5
6	-11.984	-19.459	691.38331	-56.1	8.5	-83.6	32.3	4.85378	0.843	-91.6	68.8 40.1 32.6	27.5	22.41129	5- 6
7	-11.353	-19.561	685.23920	-59.2	8.1	-82.9	31.1	4.81090	0.854	-89.7	68.6 40.1 31.4	27.7	19.36368	6- 7

JULY 31, 1964 13 HR 21 MIN 23 SEC 388 MS TAB NO 47 ATLAS PHOTO NO 47 POD SEQUENCE NO 663

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				265.411	597.65656	-7.467	-27.350	2333.112	2.322	-68.650	115.899			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.628	-19.161	677.30675	-58.7	8.6	-83.3	31.3	4.75606	0.839	-90.6	69.1 39.3 32.9	28.8	0.	1- 2
3	-11.341	-19.570	669.45015	-59.2	8.1	-82.9	31.1	4.70005	0.854	-89.7	68.6 40.1 31.4	27.7	14.95168	2- 3
4	-11.330	-18.642	679.68115	-61.0	8.6	-83.0	30.4	4.77314	0.835	-89.7	69.3 38.5 33.4	30.1	21.62791	3- 4
5	-11.957	-18.732	686.10864	-58.1	9.0	-83.7	31.5	4.81691	0.824	-91.6	69.5 38.5 34.6	29.9	19.25620	4- 5
6	-11.958	-19.470	675.44357	-56.2	8.5	-83.6	32.2	4.74188	0.843	-91.6	68.8 40.1 32.6	27.5	21.89123	5- 6
7	-11.341	-19.570	669.45015	-59.2	8.1	-82.9	31.1	4.70005	0.854	-89.7	68.6 40.1 31.4	27.7	18.91450	6- 7

JULY 31, 1964 13 HR 21 MIN 28 SEC 428 MS TAB NO 48 ATLAS PHOTO NO 48 POD SEQUENCE NO 669

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				260.371	586.75058	-7.513	-27.255	2322.206	2.326	-68.584	115.885			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.614	-19.175	665.29015	-58.7	8.5	-83.3	31.3	4.67168	0.839	-90.6	69.0 39.3 32.9	28.8	0.	1- 2
3	-11.331	-19.577	657.57706	-59.2	8.1	-82.9	31.1	4.61669	0.854	-89.7	68.6 40.1 31.4	27.7	14.68430	2- 3
4	-11.321	-18.862	667.81903	-61.0	8.6	-83.0	30.4	4.68846	0.835	-89.7	69.3 38.5 33.4	30.1	21.24234	3- 4
5	-11.936	-18.754	673.92831	-58.1	9.0	-83.7	31.5	4.73139	0.824	-91.6	69.5 38.5 34.5	29.9	18.91187	4- 5
6	-11.937	-19.480	663.45737	-56.2	8.5	-83.6	32.2	4.65773	0.843	-91.6	68.8 40.1 32.6	27.5	21.50024	5- 6
7	-11.331	-19.577	657.57706	-59.2	8.1	-82.9	31.1	4.61669	0.854	-89.7	68.6 40.1 31.4	27.7	18.57682	6- 7

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JULY 31, 1964 13 HR 21 MIN 36 SEC 827 MS

TAB NO 49 ATLAS PHOTO NO 49 POD SEQUENCE NO 679

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
251.972		568.54010	-7.590	-27.094	2303.995	2.333	-68.474	115.861

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.589	-19.202	645.17025	-58.8	8.5	-83.3	31.2	4.53040	0.840	-90.6	69.0	39.3	32.9	28.8	0.	1-2
3	-11.315	-19.592	637.69897	-59.2	8.1	-82.9	31.1	4.47713	0.854	-89.7	68.6	40.1	31.4	27.7	14.23579	2-3
4	-11.305	-18.899	647.62157	-61.0	8.6	-83.0	30.4	4.54666	0.835	-89.7	69.3	38.5	33.4	30.0	20.59535	3-4
5	-11.902	-18.794	653.53253	-58.2	9.0	-83.7	31.5	4.58820	0.824	-91.6	69.4	38.5	34.5	29.8	18.33531	4-5
6	-11.903	-19.498	643.38986	-56.3	8.5	-83.6	32.2	4.51685	0.853	-91.6	68.8	40.1	32.5	27.5	20.84413	5-6
7	-11.315	-19.592	637.69897	-59.2	8.1	-82.9	31.1	4.47713	0.854	-89.7	68.6	40.1	31.4	27.7	18.01139	6-7

JULY 31, 1964 13 HR 21 MIN 43 SEC 547 MS

TAB NO 50 ATLAS PHOTO NO 50 POD SEQUENCE NO 687

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
245.252		553.94107	-7.653	-26.963	2289.396	2.339	-68.385	115.841

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.569	-19.225	629.01880	-58.8	8.5	-83.3	31.2	4.41698	0.840	-90.6	69.0	39.3	32.9	28.8	0.	1-2
3	-11.302	-19.605	621.74145	-59.2	8.1	-82.9	31.1	4.36510	0.854	-89.7	68.6	40.1	31.3	27.7	13.87587	2-3
4	-11.292	-18.929	631.40778	-61.0	8.6	-83.0	30.4	4.43283	0.836	-89.7	69.2	38.5	33.3	30.0	20.07606	3-4
5	-11.874	-18.827	637.16006	-58.2	9.0	-83.7	31.4	4.47326	0.825	-91.6	69.4	38.5	34.5	29.8	17.87273	4-5
6	-11.875	-19.513	627.26074	-56.3	8.4	-83.6	32.1	4.40376	0.843	-91.5	68.7	40.1	32.5	27.5	20.31157	5-6
7	-11.302	-19.605	621.74145	-59.2	8.1	-82.9	31.1	4.36510	0.854	-89.7	68.6	40.1	31.3	27.7	17.55779	6-7

JULY 31, 1964 13 HR 21 MIN 50 SEC 267 MS

TAB NO 51 ATLAS PHOTO NO 51 POD SEQUENCE NO 695

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
238.533		539.31500	-7.717	-26.831	2274.770	2.345	-68.294	115.821

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.551	-19.249	612.82044	-58.8	8.5	-83.3	31.2	4.30324	0.840	-90.6	69.0	39.3	32.8	28.7	0.	1-2
3	-11.291	-19.619	605.73697	-59.2	8.1	-82.9	31.1	4.25273	0.854	-89.7	68.6	40.1	31.3	27.7	13.51520	2-3
4	-11.281	-18.961	615.14510	-61.0	8.6	-83.0	30.4	4.31866	0.836	-89.7	69.2	38.5	33.3	30.0	19.55464	3-4
5	-11.847	-18.862	620.74104	-58.2	9.0	-83.7	31.4	4.35799	0.825	-91.6	69.4	38.5	34.4	29.8	17.40965	4-5
6	-11.849	-19.529	611.12686	-56.3	8.4	-83.6	32.1	4.29035	0.844	-91.5	68.7	40.1	32.5	27.5	17.78899	5-6
7	-11.291	-19.619	605.73697	-59.2	8.1	-82.9	31.1	4.25273	0.854	-89.7	68.6	40.1	31.3	27.7	17.10353	6-7

JULY 31, 1964 13 HR 21 MIN 55 SEC 306 MS

TAB NO 52 ATLAS PHOTO NO 52 POD SEQUENCE NO 701

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
233.493		528.32700	-7.765	-26.730	2263.782	2.349	-68.225	115.805

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.537	-19.267	600.63884	-58.8	8.5	-83.3	31.2	4.21770	0.840	-90.6	68.9	39.3	32.8	28.7	0.	1-2
3	-11.282	-19.630	593.70103	-59.2	8.1	-82.9	31.1	4.16823	0.854	-89.7	68.6	40.1	31.3	27.7	13.24403	2-3
4	-11.272	-18.985	602.91515	-61.0	8.6	-83.0	30.4	4.23260	0.836	-89.7	69.2	38.5	33.3	29.9	19.16259	3-4
5	-11.827	-18.888	608.39379	-58.2	8.9	-83.7	31.4	4.27130	0.825	-91.6	69.3	38.5	34.4	29.7	17.06152	4-5
6	-11.829	-19.542	598.97880	-56.3	8.4	-83.6	32.1	4.20507	0.844	-91.5	68.7	40.1	32.5	27.5	19.39160	5-6
7	-11.282	-19.630	593.70103	-59.2	8.1	-82.9	31.1	4.16823	0.854	-89.7	68.6	40.1	31.3	27.7	16.76200	6-7

JULY 31, 1964 13 HR 22 MIN 5 SEC 386 MS

TAB NO 53 ATLAS PHOTO NO 53 POD SEQUENCE NO 713

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
223.414		506.30408	-7.863	-26.526	2241.759	2.358	-68.086	115.774

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.508	-19.307	576.16063	-58.8	8.5	-83.3	31.2	4.04581	0.841	-90.6	68.9	39.3	32.8	28.7	0.	1-2
3	-11.263	-19.654	589.51675	-59.3	8.1	-82.9	31.1	3.99844	0.855	-89.7	68.5	40.1	31.3	27.6	12.69854	2-3
4	-11.254	-19.036	578.33887	-61.0	8.6	-83.0	30.4	4.06026	0.837	-89.7	69.1	38.5	33.2	29.9	18.37378	3-4
5	-11.786	-18.943	583.58178	-58.2	8.9	-83.7	31.4	4.09711	0.826	-91.6	69.3	38.5	34.3	29.7	16.36188	4-5
6	-11.788	-19.570	574.56915	-56.4	8.4	-83.6	32.0	4.03370	0.844	-91.5	68.7	40.1	32.4	27.4	18.59206	5-6
7	-11.263	-19.654	589.51675	-59.3	8.1	-82.9	31.1	3.99844	0.855	-89.7	68.5	40.1	31.3	27.6	16.07582	6-7

JULY 31, 1964 13 HR 22 MIN 12 SEC 105 MS

TAB NO 54 ATLAS PHOTO NO 54 POD SEQUENCE NO 721

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
216.694		491.58691	-7.929	-26.388	2227.042	2.365	-67.992	115.752

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.488	-19.335	559.76933	-58.8	8.5	-83.3	31.2	3.93071	0.841	-90.6	68.9	39.3	32.7	28.6	0.	1-2
3	-11.250	-19.672	553.32242	-59.2	8.1	-82.9	31.1	3.88474	0.855	-89.7	68.5	40.1	31.3	27.6	12.33316	2-3
4	-11.241	-19.072	561.88172	-61.0	8.6	-83.0	30.4	3.94472	0.837	-89.7	69.1	38.5	33.2	29.8	17.84545	3-4
5	-11.759	-18.982	566.96706	-58.2	8.9	-83.7	31.4	3.98046	0.827	-91.6	69.2	38.5	34.3	29.6	15.89348	4-5
6	-11.760	-19.591	558.22408	-56.4	8.4	-83.6	32.0	3.91896	0.845	-91.5	68.7	40.1	32.4	27.4	18.05655	5-6
7	-11.250	-19.672	553.32242	-59.2	8.1	-82.9	31.1	3.88474	0.855	-89.7	68.5	40.1	31.3	27.6	15.61633	6-7

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JULY 31, 1964 13 HR 22 MIN 17 SEC 145 MS TAB NO 55 ATLAS PHOTO NO 55 POD SEQUENCE NO 727

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				211.654	480.53055	-7.979	-26.283	2215.986	2.369	-67.921	115.736		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.473	-19.356	547.44675	-58.8	8.5	-83.3	31.2	3.84418	0.842	-90.6	68.9 39.3 32.7	28.6	0.
3	-11.241	-19.686	541.14753	-59.2	8.1	-82.9	31.1	3.79926	0.855	-89.7	68.5 40.1 31.2	27.6	12.05867
4	-11.232	-19.098	549.50990	-61.0	8.5	-82.9	30.4	3.85767	0.837	-89.7	69.1 38.5 33.2	29.8	17.44854
5	-11.738	-19.011	544.47710	-58.2	8.9	-83.7	31.4	3.89277	0.827	-91.6	69.2 38.5 34.2	29.6	15.54152
6	-11.739	-19.606	545.93613	-56.4	8.4	-83.6	32.0	3.83249	0.845	-91.5	68.6 40.1 32.6	27.4	17.65431
7	-11.241	-19.686	541.14753	-59.2	8.1	-82.9	31.1	3.79926	0.855	-89.7	68.5 40.1 31.2	27.6	15.27112

JULY 31, 1964 13 HR 22 MIN 23 SEC 865 MS TAB NO 56 ATLAS PHOTO NO 56 POD SEQUENCE NO 735

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				204.935	465.76337	-8.046	-26.141	2201.219	2.375	-67.825	115.714		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.452	-19.384	530.97422	-58.8	8.4	-83.2	31.2	3.72851	0.842	-90.6	68.8 39.3 32.7	28.6	0.
3	-11.227	-19.704	524.87200	-59.2	8.1	-82.9	31.1	3.68500	0.855	-89.7	68.5 40.1 31.2	27.6	11.69202
4	-11.219	-19.134	532.97182	-61.0	8.5	-82.9	30.5	3.74176	0.838	-89.7	69.0 38.5 33.1	29.8	16.91833
5	-11.709	-19.050	537.78143	-58.2	8.9	-83.7	31.4	3.77556	0.828	-91.6	69.2 38.5 34.2	29.6	15.07112
6	-11.710	-19.627	529.50974	-56.4	8.4	-83.6	32.0	3.71737	0.845	-91.5	68.6 40.1 32.3	27.4	17.11705
7	-11.227	-19.704	524.87200	-59.2	8.1	-82.9	31.1	3.68500	0.855	-89.7	68.5 40.1 31.2	27.6	14.80959

JULY 31, 1964 13 HR 22 MIN 27 SEC 449 MS TAB NO 57 ATLAS PHOTO NO 57 POD SEQUENCE NO 739

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				201.575	458.36459	-8.081	-26.070	2193.824	2.379	-67.776	115.703		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.442	-19.398	522.71837	-58.8	8.4	-83.2	31.2	3.67054	0.842	-90.6	68.8 39.3 32.6	28.6	0.
3	-11.220	-19.713	516.71478	-59.2	8.1	-82.9	31.1	3.62773	0.856	-89.7	68.5 40.1 31.2	27.6	11.50827
4	-11.212	-19.153	524.68320	-61.0	8.5	-82.9	30.5	3.68357	0.838	-89.7	69.0 38.5 33.1	29.8	16.65271
5	-11.695	-19.069	529.41399	-58.2	8.9	-83.7	31.4	3.71681	0.828	-91.6	69.2 38.5 34.1	29.5	14.83536
6	-11.696	-19.637	521.27702	-56.4	8.4	-83.6	32.0	3.65957	0.845	-91.5	68.6 40.1 32.3	27.4	16.84789
7	-11.220	-19.713	516.71478	-59.2	8.1	-82.9	31.1	3.62773	0.856	-89.7	68.5 40.1 31.2	27.6	14.57835

JULY 31, 1964 13 HR 22 MIN 32 SEC 264 MS TAB NO 58 ATLAS PHOTO NO 58 POD SEQUENCE NO 745

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				196.535	447.26324	-8.132	-25.961	2182.719	2.383	-67.703	115.685		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.426	-19.420	510.30445	-58.8	8.4	-83.2	31.2	3.58337	0.842	-90.6	68.8 39.3 32.6	28.5	0.
3	-11.210	-19.728	504.44928	-59.2	8.0	-82.9	31.1	3.54162	0.856	-89.7	68.5 40.1 31.2	27.6	11.23196
4	-11.202	-19.181	512.21983	-61.0	8.5	-82.9	30.5	3.59607	0.838	-89.7	69.0 38.5 33.1	29.7	16.25313
5	-11.673	-19.099	516.83220	-58.3	8.8	-83.7	31.4	3.62848	0.828	-91.6	69.1 38.5 34.1	29.5	14.48093
6	-11.674	-19.654	508.89812	-56.5	8.3	-83.6	32.0	3.57247	0.844	-91.5	68.6 40.1 32.3	27.3	16.44302
7	-11.210	-19.728	504.44928	-59.2	8.0	-82.9	31.1	3.54162	0.856	-89.7	68.5 40.1 31.2	27.6	14.23056

JULY 31, 1964 13 HR 22 MIN 37 SEC 304 MS TAB NO 59 ATLAS PHOTO NO 59 POD SEQUENCE NO 751

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				191.496	436.14160	-8.184	-25.852	2171.597	2.388	-67.629	115.668		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.410	-19.443	497.85889	-58.8	8.4	-83.2	31.2	3.49597	0.843	-90.6	68.8 39.3 32.6	28.5	0.
3	-11.200	-19.743	492.15242	-59.2	8.0	-82.9	31.1	3.45528	0.856	-89.7	68.5 40.1 31.2	27.5	10.95503
4	-11.191	-19.209	499.72471	-61.0	8.5	-82.9	30.5	3.50835	0.839	-89.7	69.0 38.5 33.0	29.7	15.85258
5	-11.651	-19.130	504.21855	-58.3	8.8	-83.7	31.4	3.53993	0.829	-91.6	69.1 38.5 34.1	29.5	14.12567
6	-11.652	-19.671	496.48772	-56.5	8.3	-83.6	31.9	3.48554	0.846	-91.5	68.6 40.1 32.2	27.3	16.03719
7	-11.200	-19.743	492.15242	-59.2	8.0	-82.9	31.1	3.45528	0.856	-89.7	68.5 40.1 31.2	27.5	13.88202

JULY 31, 1964 13 HR 22 MIN 42 SEC 344 MS TAB NO 60 ATLAS PHOTO NO 60 POD SEQUENCE NO 757

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				186.456	425.00284	-8.237	-25.741	2160.458	2.393	-67.554	115.650		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.394	-19.466	485.38350	-58.8	8.4	-83.2	31.2	3.40837	0.843	-90.6	68.7 39.3 32.5	28.5	0.
3	-11.189	-19.758	479.82587	-59.2	8.0	-82.9	31.1	3.36874	0.856	-89.7	68.4 40.1 31.1	27.5	10.67753
4	-11.181	-19.238	487.19977	-60.9	8.5	-82.9	30.5	3.42042	0.839	-89.7	68.9 38.5 33.0	29.6	15.45126
5	-11.629	-19.161	491.57510	-58.3	8.8	-83.7	31.4	3.45116	0.829	-91.6	69.1 38.5 34.0	29.4	13.76971
6	-11.630	-19.688	484.04756	-56.5	8.3	-83.6	31.9	3.39821	0.846	-91.5	68.5 40.1 32.2	27.3	15.63063
7	-11.189	-19.758	479.82587	-59.2	8.0	-82.9	31.1	3.36874	0.856	-89.7	68.4 40.1 31.1	27.5	13.53268

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JULY 31, 1964 13 HR 22 MIN 47 SEC 383 MS TAB NO 61 ATLAS PHOTO NO 61 POD SEQUENCE NO 763

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ		
				181.416		413.84769		-8.290		-25.629		2149.303		2.398		-67.478		115.633		
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.374	-19.488	472.90513	-58.8	8.4	-83.2	31.2	3.32075	0.843	-90.6	68.7	39.3	32.5	28.5	0.	1-2				
3	-11.176	-19.772	467.49488	-59.3	8.0	-82.9	31.1	3.32817	0.856	-89.7	68.4	40.1	31.1	27.5	10.40071	2-3				
4	-11.170	-19.266	474.67302	-60.9	8.5	-82.9	30.5	3.33247	0.839	-89.7	68.9	38.5	33.0	29.6	15.05111	3-4				
5	-11.607	-19.191	478.93033	-58.3	8.8	-83.6	31.4	3.36239	0.829	-91.6	69.0	38.5	34.0	29.4	13.41378	4-5				
6	-11.008	-19.704	471.60337	-56.5	8.3	-83.6	31.9	3.31085	0.846	-91.5	68.5	40.1	32.2	27.3	15.22528	5-6				
7	-11.178	-19.772	467.49488	-59.3	8.0	-82.9	31.1	3.28217	0.856	-89.7	68.4	40.1	31.1	27.5	13.18343	6-7				

JULY 31, 1964 13 HR 22 MIN 54 SEC 103 MS TAB NO 62 ATLAS PHOTO NO 62 POD SEQUENCE NO 771

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ		
				174.697		398.94769		-8.262		-25.478		2134.403		2.405		-67.377		115.608		
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.356	-19.516	456.73198	-58.8	8.4	-83.2	31.2	3.20367	0.844	-90.6	68.7	39.3	32.5	28.4	0.	1-2				
3	-11.163	-19.790	451.01774	-59.3	8.0	-82.9	31.0	3.16649	0.856	-89.7	68.4	40.1	31.1	27.5	10.03132	2-3				
4	-11.155	-19.302	457.73584	-60.9	8.5	-82.9	30.5	3.21497	0.840	-89.7	68.9	38.5	32.9	29.6	14.51719	3-4				
5	-11.577	-19.230	462.03599	-58.3	8.8	-83.6	31.3	3.24378	0.830	-91.6	69.0	38.5	33.9	29.4	12.93858	4-5				
6	-11.578	-19.725	454.97540	-56.5	8.3	-83.6	31.9	3.19411	0.847	-91.5	68.5	40.1	32.2	27.3	14.68450	5-6				
7	-11.163	-19.790	451.01774	-59.3	8.0	-82.9	31.0	3.16649	0.856	-89.7	68.4	40.1	31.1	27.5	12.71679	6-7				

JULY 31, 1964 13 HR 22 MIN 57 SEC 463 MS TAB NO 63 ATLAS PHOTO NO 63 POD SEQUENCE NO 775

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ		
				171.337		395.48648		-8.398		-25.402		2126.942		2.408		-67.325		115.596		
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.345	-19.530	447.87405	-58.8	8.4	-83.2	31.2	3.14498	0.844	-90.5	68.7	39.3	32.5	28.4	0.	1-2				
3	-11.155	-19.800	442.75800	-59.3	8.0	-82.9	31.0	3.10850	0.857	-89.7	68.4	40.1	31.1	27.5	9.84616	2-3				
4	-11.148	-19.320	449.54587	-60.9	8.5	-82.9	30.5	3.15606	0.840	-89.7	68.9	38.5	32.9	29.6	14.24959	3-4				
5	-11.561	-19.249	453.56739	-58.3	8.8	-83.6	31.3	3.18432	0.830	-91.6	69.0	38.5	33.9	29.3	12.70037	4-5				
6	-11.563	-19.735	446.64018	-56.5	8.3	-83.6	31.9	3.13559	0.847	-91.5	68.5	40.1	32.1	27.2	14.41350	5-6				
7	-11.155	-19.800	442.75800	-59.3	8.0	-82.9	31.0	3.10850	0.857	-89.7	68.4	40.1	31.1	27.5	12.48286	6-7				

JULY 31, 1964 13 HR 23 MIN 0 SEC 822 MS TAB NO 64 ATLAS PHOTO NO 64 POD SEQUENCE NO 779

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ		
				167.977		384.01730		-8.434		-25.325		2119.473		2.411		-67.274		115.584		
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.334	-19.545	439.50254	-58.8	8.4	-83.2	31.2	3.08619	0.844	-90.5	68.7	39.3	32.5	28.4	0.	1-2				
3	-11.148	-19.809	434.48470	-59.3	8.0	-82.9	31.0	3.05041	0.857	-89.7	68.4	40.1	31.1	27.5	9.66083	2-3				
4	-11.140	-19.339	441.14232	-60.9	8.5	-82.9	30.5	3.09707	0.840	-89.7	68.8	38.5	32.9	29.6	13.98166	3-4				
5	-11.544	-19.269	445.08521	-58.3	8.8	-83.6	31.3	3.12477	0.830	-91.6	69.0	38.5	33.9	29.3	12.46176	4-5				
6	-11.547	-19.746	438.29139	-56.6	8.3	-83.6	31.8	3.07696	0.847	-91.5	68.5	40.1	32.1	27.2	14.14214	5-6				
7	-11.148	-19.809	434.48470	-59.3	8.0	-82.9	31.0	3.05041	0.857	-89.7	68.4	40.1	31.1	27.5	12.24871	6-7				

JULY 31, 1964 13 HR 23 MIN 7 SEC 542 MS TAB NO 65 ATLAS PHOTO NO 65 POD SEQUENCE NO 787

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ		
				161.257		369.05658		-8.508		-25.170		2104.512		2.418		-67.169		115.558		
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.311	-19.575	422.71793	-58.8	8.4	-83.2	31.1	2.96833	0.844	-90.5	68.6	39.3	32.4	28.4	0.	1-2				
3	-11.132	-19.829	417.89674	-59.3	8.0	-82.9	31.0	2.93395	0.857	-89.7	68.4	40.1	31.1	27.5	9.28927	2-3				
4	-11.125	-19.376	424.29358	-60.9	8.5	-82.9	30.5	2.97878	0.840	-89.7	68.8	38.5	32.9	29.5	13.44464	3-4				
5	-11.515	-19.310	428.07914	-58.3	8.7	-83.6	31.3	3.00538	0.831	-91.6	68.9	38.5	33.9	29.3	11.98361	4-5				
6	-11.516	-19.768	421.55232	-56.6	8.3	-83.6	31.8	2.95947	0.847	-91.5	68.5	40.1	32.1	27.2	13.59830	5-6				
7	-11.132	-19.829	417.89674	-59.3	8.0	-82.9	31.0	2.93395	0.857	-89.7	68.4	40.1	31.1	27.5	11.77908	6-7				

JULY 31, 1964 13 HR 23 MIN 12 SEC 582 MS TAB NO 66 ATLAS PHOTO NO 66 POD SEQUENCE NO 793

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ		
				156.218		357.81555		-8.564		-25.052		2093.271		2.423		-67.090		115.539		
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-11.294	-19.597	410.09030	-58.9	8.4	-83.2	31.1	2.87966	0.844	-90.5	68.6	39.3	32.4	28.4	0.	1-2				
3	-11.120	-19.844	405.41687	-59.3	8.0	-82.9	31.0	2.84633	0.857	-89.7	68.4	40.1	31.0	27.4	9.00989	2-3				
4	-11.113	-19.405	411.61773	-60.9	8.5	-82.9	30.5	2.88979	0.840	-89.6	68.8	38.5	32.8	29.5	13.04071	3-4				
5	-11.492	-19.341	415.28522	-58.3	8.7	-83.6	31.3	2.91556	0.831	-91.5	68.9	38.5	33.8	29.3	11.62395	4-5				
6	-11.493	-19.785	408.95902	-56.6	8.3	-83.6	31.8	2.87106	0.847	-91.5	68.4	40.1	32.1	27.2	13.18931	5-6				
7	-11.120	-19.844	405.41687	-59.3	8.0	-82.9	31.0	2.84633	0.857	-89.7	68.4	40.1	31.0	27.4	11.42606	6-7				

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JULY 31, 1964 13 HR 23 MIN 15 SEC 942 MS TAB NO 67 ATLAS PHOTO NO 67 POD SEQUENCE NO 797

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
152.858 350.31189 -8.601 -24.972 2085.767 2.427 -67.037 115.526

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.282	-19.613	401.65531	-58.9	8.4	-83.2	31.1	2.82043	0.844	-90.5	68.6	39.3	32.4	28.4	0.	1- 2
3	-11.112	-19.854	397.08035	-59.3	8.0	-82.9	31.0	2.78780	0.857	-89.7	68.3	40.1	31.0	27.4	8.82336	2- 3
4	-11.105	-19.425	403.15031	-60.9	8.5	-82.9	30.5	2.83034	0.841	-89.6	68.8	38.5	32.8	29.5	12.77091	3- 4
5	-11.476	-19.361	406.73952	-58.3	8.7	-83.6	31.3	2.85556	0.831	-91.5	68.9	38.5	33.8	29.3	11.38395	4- 5
6	-11.477	-19.797	400.54729	-56.6	8.2	-83.6	31.8	2.81200	0.848	-91.5	68.4	40.1	32.1	27.2	12.91614	5- 6
7	-11.112	-19.854	397.08035	-59.3	8.0	-82.9	31.0	2.78780	0.857	-89.7	68.3	40.1	31.0	27.4	11.19031	6- 7

JULY 31, 1964 13 HR 23 MIN 20 SEC 981 MS TAB NO 68 ATLAS PHOTO NO 68 POD SEQUENCE NO 803

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
147.818 339.04172 -8.658 -24.852 2074.497 2.432 -66.956 115.506

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.265	-19.637	388.97602	-58.9	8.3	-83.2	31.1	2.73140	0.845	-90.5	68.6	39.3	32.4	28.3	0.	1- 2
3	-11.101	-19.870	384.54884	-59.3	8.0	-82.9	31.0	2.69982	0.857	-89.7	68.3	40.1	31.0	27.4	8.54313	2- 3
4	-11.094	-19.454	390.42213	-60.9	8.5	-82.9	30.5	2.74098	0.841	-89.6	68.7	38.5	32.8	29.5	12.36537	3- 4
5	-11.453	-19.393	393.89422	-58.3	8.7	-83.6	31.3	2.76538	0.832	-91.5	68.8	38.5	33.8	29.2	11.02330	4- 5
6	-11.454	-19.814	387.90319	-56.6	8.2	-83.6	31.8	2.72324	0.846	-91.5	68.4	40.1	32.0	27.2	12.50560	5- 6
7	-11.101	-19.870	384.54884	-59.3	8.0	-82.9	31.0	2.69982	0.857	-89.7	68.3	40.1	31.0	27.4	10.83624	6- 7

JULY 31, 1964 13 HR 23 MIN 22 SEC 001 MS TAB NO 69 ATLAS PHOTO NO 69 POD SEQUENCE NO 805

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
146.138 335.28122 -8.677 -24.811 2070.737 2.434 -66.929 115.499

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.259	-19.645	384.74209	-58.9	8.3	-83.2	31.1	2.70167	0.845	-90.5	68.6	39.3	32.4	28.3	0.	1- 2
3	-11.097	-19.876	380.36422	-59.3	8.0	-82.9	31.0	2.67044	0.857	-89.7	68.3	40.1	31.0	27.4	8.44953	2- 3
4	-11.090	-19.464	386.17188	-60.9	8.5	-82.9	30.6	2.71114	0.841	-89.6	68.7	38.5	32.8	29.4	12.22998	3- 4
5	-11.445	-19.404	389.60490	-58.3	8.7	-83.6	31.3	2.73527	0.832	-91.5	68.8	38.5	33.8	29.2	10.90290	4- 5
6	-11.446	-19.820	383.68099	-56.6	8.2	-83.6	31.7	2.69360	0.848	-91.5	68.4	40.1	32.0	27.2	12.36853	5- 6
7	-11.097	-19.876	380.36422	-59.3	8.0	-82.9	31.0	2.67044	0.857	-89.7	68.3	40.1	31.0	27.4	10.71791	6- 7

JULY 31, 1964 13 HR 23 MIN 24 SEC 341 MS TAB NO 70 ATLAS PHOTO NO 70 POD SEQUENCE NO 807

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
144.458 331.51852 -8.696 -24.771 2066.974 2.436 -66.902 115.493

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.253	-19.653	380.50407	-58.9	8.3	-83.2	31.1	2.67191	0.845	-90.5	68.6	39.3	32.3	28.3	0.	1- 2
3	-11.093	-19.881	376.17554	-59.3	8.0	-82.9	31.0	2.64104	0.857	-89.7	68.3	40.1	31.0	27.4	8.35598	2- 3
4	-11.086	-19.474	381.91754	-60.9	8.5	-82.9	30.6	2.68128	0.841	-89.6	68.7	38.5	32.8	29.4	12.09447	3- 4
5	-11.437	-19.414	385.31148	-58.3	8.7	-83.6	31.3	2.70512	0.832	-91.5	68.8	38.5	33.7	29.2	10.78231	4- 5
6	-11.438	-19.826	379.45474	-56.7	8.2	-83.6	31.7	2.66393	0.848	-91.5	68.4	40.1	32.0	27.2	12.23134	5- 6
7	-11.093	-19.881	376.17554	-59.3	8.0	-82.9	31.0	2.64104	0.857	-89.7	68.3	40.1	31.0	27.4	10.59959	6- 7

JULY 31, 1964 13 HR 23 MIN 26 SEC 21 MS TAB NO 71 ATLAS PHOTO NO 71 POD SEQUENCE NO 809

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
142.778 327.75385 -8.715 -24.730 2063.209 2.437 -66.875 115.486

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.248	-19.661	376.26218	-58.9	8.3	-83.2	31.1	2.64212	0.845	-90.5	68.5	39.3	32.3	28.3	0.	1- 2
3	-11.089	-19.887	371.98301	-59.3	8.0	-82.9	31.0	2.61160	0.857	-89.7	68.3	40.1	31.0	27.4	8.26220	2- 3
4	-11.082	-19.484	377.65931	-60.9	8.5	-82.9	30.6	2.65138	0.841	-89.6	68.7	38.5	32.8	29.4	11.95884	3- 4
5	-11.429	-19.425	381.01415	-58.4	8.7	-83.6	31.3	2.67495	0.832	-91.5	68.8	38.5	33.7	29.2	10.66161	4- 5
6	-11.431	-19.833	375.22460	-56.7	8.2	-83.6	31.7	2.63423	0.848	-91.5	68.4	40.1	32.0	27.2	12.09407	5- 6
7	-11.089	-19.887	371.98301	-59.3	8.0	-82.9	31.0	2.61160	0.857	-89.7	68.3	40.1	31.0	27.4	10.48105	6- 7

JULY 31, 1964 13 HR 23 MIN 27 SEC 701 MS TAB NO 72 ATLAS PHOTO NO 72 POD SEQUENCE NO 811

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
141.099 323.98737 -8.735 -24.689 2059.443 2.439 -66.848 115.479

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.242	-19.669	372.01656	-58.9	8.3	-83.2	31.1	2.61231	0.845	-90.5	68.5	39.3	32.3	28.3	0.	1- 2
3	-11.085	-19.892	367.78680	-59.3	8.0	-82.9	31.0	2.58214	0.857	-89.7	68.3	40.1	31.0	27.4	8.16839	2- 3
4	-11.078	-19.494	373.39737	-60.9	8.5	-82.9	30.6	2.62146	0.841	-89.6	68.7	38.5	32.7	29.4	11.82312	3- 4
5	-11.421	-19.436	376.71310	-58.4	8.7	-83.6	31.3	2.64476	0.832	-91.5	68.8	38.5	33.7	29.2	10.54100	4- 5
6	-11.423	-19.839	370.99076	-56.7	8.2	-83.6	31.7	2.60451	0.848	-91.5	68.4	40.1	32.0	27.2	11.95667	5- 6
7	-11.085	-19.892	367.78680	-59.3	8.0	-82.9	31.0	2.58214	0.857	-89.7	68.3	40.1	31.0	27.4	10.36251	6- 7

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JULY 31, 1964 13 HR 23 MIN 29 SEC 381 MS TAB NO 73 ATLAS PHOTO NO 73 POD SEQUENCE NO 813

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				139.419	320.21872	-8.754	-24.648	2055.674	2.441	-66.820	115.472		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.236	-19.677	367.76614	-58.9	8.3	-83.2	31.1	2.58246	0.845	-90.5	68.5 39.3 32.3	28.3	0.
3	-11.080	-19.898	363.58587	-59.3	8.0	-82.9	31.0	2.55265	0.857	-89.7	68.3 40.1 31.0	27.4	8.07447
4	-11.074	-19.505	369.13067	-60.9	8.4	-82.9	30.6	2.59151	0.841	-89.6	68.7 38.5 32.7	29.4	11.68723
5	-11.413	-19.447	372.40717	-58.4	8.7	-83.6	31.3	2.61453	0.832	-91.5	68.8 38.5 33.7	29.2	10.41998
6	-11.415	-19.845	368.75217	-56.7	8.2	-83.6	31.7	2.57475	0.848	-91.5	68.4 40.1 32.0	27.2	11.81912
7	-11.080	-19.898	363.58587	-59.3	8.0	-82.9	31.0	2.55265	0.857	-89.7	68.3 40.1 31.0	27.4	10.24385

JULY 31, 1964 13 HR 23 MIN 31 SEC 61 MS TAB NO 74 ATLAS PHOTO NO 74 POD SEQUENCE NO 815

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				137.739	316.44824	-8.773	-24.607	2051.904	2.443	-66.793	115.465		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.230	-19.685	363.51071	-58.9	8.3	-83.2	31.1	2.55258	0.845	-90.5	68.5 39.3 32.3	28.3	0.
3	-11.076	-19.904	359.38002	-59.3	8.0	-82.9	31.0	2.52312	0.857	-89.6	68.3 40.1 31.0	27.4	7.98044
4	-11.070	-19.515	364.45892	-60.9	8.4	-82.9	30.6	2.56152	0.841	-89.6	68.7 38.5 32.7	29.4	11.55118
5	-11.405	-19.458	368.09609	-58.4	8.7	-83.6	31.3	2.58426	0.832	-91.5	68.8 38.5 33.7	29.2	10.29904
6	-11.407	-19.852	362.50847	-56.7	8.2	-83.6	31.7	2.54466	0.848	-91.5	68.4 40.1 32.0	27.2	11.68139
7	-11.076	-19.904	359.38002	-59.3	8.0	-82.9	31.0	2.52312	0.857	-89.6	68.3 40.1 31.0	27.4	10.12488

JULY 31, 1964 13 HR 23 MIN 32 SEC 741 MS TAB NO 75 ATLAS PHOTO NO 75 POD SEQUENCE NO 817

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				136.059	312.67566	-8.793	-24.566	2048.131	2.445	-66.765	115.459		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.224	-19.694	359.25127	-58.9	8.3	-83.2	31.1	2.52267	0.845	-90.5	68.5 39.3 32.3	28.3	0.
3	-11.072	-19.909	355.17021	-59.3	8.0	-82.9	31.0	2.49356	0.857	-89.6	68.3 40.1 31.0	27.4	7.88630
4	-11.066	-19.525	360.58317	-60.9	8.4	-82.9	30.6	2.53150	0.842	-89.6	68.7 38.5 32.7	29.4	11.41503
5	-11.397	-19.469	363.78100	-58.4	8.7	-83.6	31.3	2.55397	0.832	-91.5	68.7 38.5 33.7	29.2	10.17790
6	-11.399	-19.858	358.26080	-56.7	8.2	-83.6	31.7	2.51514	0.848	-91.5	68.4 40.1 32.0	27.2	11.54356
7	-11.072	-19.909	355.17021	-59.3	8.0	-82.9	31.0	2.49356	0.857	-89.6	68.3 40.1 31.0	27.4	10.00590

JULY 31, 1964 13 HR 23 MIN 34 SEC 420 MS TAB NO 76 ATLAS PHOTO NO 76 POD SEQUENCE NO 819

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				134.379	308.90111	-8.812	-24.524	2044.356	2.446	-66.737	115.452		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.218	-19.702	354.98795	-58.9	8.3	-83.2	31.1	2.49273	0.845	-90.5	68.5 39.3 32.3	28.3	0.
3	-11.068	-19.915	350.95654	-59.3	8.0	-82.9	31.0	2.46398	0.858	-89.6	68.3 40.1 31.0	27.4	7.79206
4	-11.062	-19.536	356.30354	-60.9	8.4	-82.8	30.6	2.50145	0.842	-89.6	68.6 38.5 32.7	29.4	11.27874
5	-11.389	-19.480	359.46203	-58.4	8.7	-83.6	31.3	2.52365	0.832	-91.5	68.7 38.5 33.7	29.1	10.05656
6	-11.390	-19.865	354.00227	-56.7	8.2	-83.6	31.7	2.48529	0.848	-91.5	68.4 40.1 32.0	27.1	11.40562
7	-11.068	-19.915	350.95654	-59.3	8.0	-82.9	31.0	2.46398	0.858	-89.6	68.3 40.1 31.0	27.4	9.88672

JULY 31, 1964 13 HR 23 MIN 36 SEC 100 MS TAB NO 77 ATLAS PHOTO NO 77 POD SEQUENCE NO 821

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				132.699	305.12445	-8.832	-24.483	2040.580	2.448	-66.710	115.445		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.212	-19.711	350.72062	-58.9	8.3	-83.2	31.1	2.46277	0.845	-90.5	68.5 39.3 32.3	28.3	0.
3	-11.064	-19.921	346.73889	-59.3	8.0	-82.9	31.0	2.43437	0.858	-89.6	68.3 40.1 31.0	27.4	7.69782
4	-11.057	-19.546	352.01990	-60.9	8.4	-82.8	30.6	2.47128	0.842	-89.6	68.6 38.5 32.7	29.4	11.14237
5	-11.381	-19.492	355.13903	-58.4	8.7	-83.6	31.3	2.49330	0.833	-91.5	68.7 38.5 33.7	29.1	9.93531
6	-11.382	-19.871	349.75375	-56.7	8.2	-83.6	31.7	2.45541	0.848	-91.5	68.4 40.1 32.0	27.1	11.26756
7	-11.064	-19.921	346.73889	-59.3	8.0	-82.9	31.0	2.43437	0.858	-89.6	68.3 40.1 31.0	27.4	9.76763

JULY 31, 1964 13 HR 23 MIN 37 SEC 780 MS TAB NO 78 ATLAS PHOTO NO 78 POD SEQUENCE NO 823

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				131.019	301.34604	-8.851	-24.441	2036.801	2.450	-66.682	115.438		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.206	-19.719	346.44969	-58.9	8.3	-83.2	31.1	2.43278	0.846	-90.5	68.5 39.3 32.3	28.3	0.
3	-11.059	-19.927	342.51764	-59.3	8.0	-82.9	31.0	2.40473	0.858	-89.6	68.3 40.1 31.0	27.4	7.60343
4	-11.053	-19.557	347.73264	-60.9	8.4	-82.8	30.6	2.44128	0.842	-89.6	68.6 38.5 32.7	29.4	11.00588
5	-11.373	-19.503	350.81241	-58.4	8.7	-83.6	31.3	2.46292	0.833	-91.5	68.7 38.5 33.6	29.1	9.81377
6	-11.374	-19.878	345.49463	-56.7	8.2	-83.6	31.7	2.42551	0.849	-91.5	68.3 40.1 32.0	27.1	11.12941
7	-11.059	-19.927	342.51764	-59.3	8.0	-82.9	31.0	2.40473	0.858	-89.6	68.3 40.1 31.0	27.4	9.64825

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TAB NO 79 ATLAS PHOTO NO 79 POD SEQUENCE NO 825														
JULY 31, 1964 13 HR 23 MIN 39 SEC 460 MS														
TRAJECTORY DATA														
SEC TO IMPACT 129.339 ALT 297.56537 LAT -8.871 LON -24.399 R 2033.021 V 2.452 PTH -66.654 AZ 115.431														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.200	-19.728	342.17455	-58.9	8.3	-83.2	31.1	2.40276	0.846	-90.5	68.5	39.3	32.3	28.3
3	-11.055	-19.933	338.29222	-59.3	8.0	-82.9	31.0	2.37507	0.858	-89.6	68.3	40.1	31.0	27.4
4	-11.049	-19.568	343.44117	-60.9	8.4	-82.8	30.6	2.41115	0.842	-89.6	68.6	38.5	32.7	29.4
5	-11.365	-19.514	346.48156	-58.4	8.7	-83.6	31.3	2.43251	0.833	-91.5	68.7	38.5	33.6	29.1
6	-11.366	-19.884	341.23131	-56.7	8.2	-83.6	31.7	2.39528	0.849	-91.5	68.3	40.1	31.9	27.1
7	-11.055	-19.933	338.29222	-59.3	8.0	-82.9	31.0	2.37507	0.858	-89.6	68.3	40.1	31.0	27.4
TAB NO 80 ATLAS PHOTO NO 80 POD SEQUENCE NO 827														
JULY 31, 1964 13 HR 23 MIN 41 SEC 140 MS														
TRAJECTORY DATA														
SEC TO IMPACT 127.659 ALT 293.78262 LAT -8.891 LON -24.357 R 2029.238 V 2.454 PTH -66.626 AZ 115.424														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.193	-19.737	337.89540	-58.9	8.3	-83.2	31.1	2.37271	0.846	-90.5	68.5	39.3	32.3	28.2
3	-11.051	-19.939	334.06282	-59.3	8.0	-82.9	31.0	2.34537	0.858	-89.6	68.3	40.1	31.0	27.4
4	-11.045	-19.578	339.14568	-60.9	8.4	-82.8	30.6	2.38099	0.842	-89.6	68.6	38.5	32.7	29.3
5	-11.356	-19.526	342.14669	-58.4	8.7	-83.6	31.3	2.40208	0.833	-91.5	68.7	38.5	33.6	29.1
6	-11.358	-19.891	336.96401	-56.7	8.2	-83.6	31.7	2.36562	0.849	-91.5	68.3	40.1	31.9	27.1
7	-11.051	-19.939	334.06282	-59.3	8.0	-82.9	31.0	2.34537	0.858	-89.6	68.3	40.1	31.0	27.4
TAB NO 81 ATLAS PHOTO NO 81 POD SEQUENCE NO 829														
JULY 31, 1964 13 HR 23 MIN 42 SEC 820 MS														
TRAJECTORY DATA														
SEC TO IMPACT 125.979 ALT 269.99799 LAT -8.911 LON -24.314 R 2025.453 V 2.456 PTH -66.598 AZ 115.416														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.187	-19.746	333.61246	-58.9	8.3	-83.2	31.1	2.34263	0.846	-90.5	68.5	39.3	32.2	28.2
3	-11.046	-19.946	329.82963	-59.3	8.0	-82.9	31.0	2.31565	0.858	-89.6	68.2	40.1	30.9	27.4
4	-11.040	-19.589	334.84640	-60.9	8.4	-82.8	30.6	2.35081	0.842	-89.6	68.6	38.5	32.7	29.3
5	-11.348	-19.537	337.80801	-58.4	8.7	-83.6	31.2	2.37162	0.833	-91.5	68.7	38.5	33.6	29.1
6	-11.349	-19.898	332.69290	-56.7	8.2	-83.6	31.7	2.33564	0.849	-91.5	68.3	40.1	31.9	27.1
7	-11.046	-19.946	329.82963	-59.3	8.0	-82.9	31.0	2.31565	0.858	-89.6	68.2	40.1	30.9	27.4
TAB NO 82 ATLAS PHOTO NO 82 POD SEQUENCE NO 831														
JULY 31, 1964 13 HR 23 MIN 44 SEC 500 MS														
TRAJECTORY DATA														
SEC TO IMPACT 124.300 ALT 286.21133 LAT -8.931 LON -24.272 R 2021.667 V 2.457 PTH -66.569 AZ 115.409														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.181	-19.754	329.32490	-58.9	8.3	-83.2	31.1	2.31253	0.846	-90.5	68.4	39.3	32.2	28.2
3	-11.042	-19.952	325.59191	-59.3	8.0	-82.8	31.0	2.28590	0.858	-89.6	68.2	40.1	30.9	27.4
4	-11.036	-19.600	330.54245	-60.9	8.4	-82.8	30.6	2.32059	0.842	-89.6	68.6	38.5	32.6	29.3
5	-11.340	-19.549	333.46471	-58.4	8.7	-83.6	31.2	2.34113	0.833	-91.5	68.7	38.5	33.6	29.1
6	-11.341	-19.905	328.41727	-56.7	8.2	-83.6	31.7	2.30562	0.849	-91.5	68.3	40.1	31.9	27.1
7	-11.042	-19.952	325.59191	-59.3	8.0	-82.8	31.0	2.28590	0.858	-89.6	68.2	40.1	30.9	27.4
TAB NO 83 ATLAS PHOTO NO 83 POD SEQUENCE NO 833														
JULY 31, 1964 13 HR 23 MIN 46 SEC 180 MS														
TRAJECTORY DATA														
SEC TO IMPACT 122.620 ALT 282.42256 LAT -8.951 LON -24.229 R 2017.878 V 2.459 PTH -66.541 AZ 115.402														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.175	-19.763	325.03239	-58.9	8.3	-83.2	31.1	2.28238	0.846	-90.5	68.4	39.3	32.2	28.2
3	-11.037	-19.958	321.34929	-59.3	8.0	-82.8	31.0	2.25612	0.858	-89.6	68.2	40.1	30.9	27.3
4	-11.032	-19.611	326.23345	-60.9	8.4	-82.8	30.6	2.29024	0.842	-89.6	68.6	38.5	32.6	29.3
5	-11.331	-19.561	329.11637	-58.4	8.6	-83.6	31.2	2.31060	0.833	-91.5	68.7	38.5	33.6	29.1
6	-11.333	-19.912	324.13680	-56.7	8.2	-83.6	31.7	2.27557	0.849	-91.5	68.3	40.1	31.9	27.1
7	-11.037	-19.958	321.34929	-59.3	8.0	-82.8	31.0	2.25612	0.858	-89.6	68.2	40.1	30.9	27.3
TAB NO 84 ATLAS PHOTO NO 84 POD SEQUENCE NO 835														
JULY 31, 1964 13 HR 23 MIN 47 SEC 860 MS														
TRAJECTORY DATA														
SEC TO IMPACT 120.940 ALT 278.63182 LAT -8.971 LON -24.187 R 2014.087 V 2.461 PTH -66.513 AZ 115.395														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-11.169	-19.773	320.73602	-58.9	8.3	-83.2	31.1	2.25221	0.846	-90.5	68.4	39.3	32.2	28.2
3	-11.033	-19.965	317.10281	-59.3	8.0	-82.8	31.0	2.22630	0.858	-89.6	68.2	40.1	30.9	27.3
4	-11.027	-19.622	321.92056	-60.9	8.4	-82.8	30.6	2.26006	0.842	-89.6	68.6	38.5	32.6	29.3
5	-11.323	-19.572	324.76416	-58.4	8.6	-83.6	31.2	2.28005	0.833	-91.5	68.6	38.5	33.6	29.1
6	-11.324	-19.919	319.85244	-56.7	8.2	-83.6	31.7	2.24549	0.849	-91.5	68.3	40.1	31.9	27.1
7	-11.033	-19.965	317.10281	-59.3	8.0	-82.8	31.0	2.22630	0.858	-89.6	68.2	40.1	30.9	27.3

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JULY 31, 1964 13 HR 23 MIN 49 SEC 540 MS TAB NO 85 ATLAS PHOTO NO 85 POD SEQUENCE NO 837

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				119.260		274.83888		-8.991		-24.144		2010.294		2.463		-66.484		115.388	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.162	-19.787	316.43590	-58.9	8.3	-83.2	31.1	2.22202	0.846	-90.5	68.4	39.3	32.2	28.2	0.	1-2			
3	-11.029	-19.971	312.85223	-59.3	8.0	-82.8	31.0	2.19646	0.858	-89.6	68.2	40.1	30.9	27.3	6.94057	2-3			
4	-11.023	-19.633	317.60358	-60.9	8.4	-82.8	30.6	2.22976	0.843	-89.6	68.6	38.5	32.6	29.3	10.04684	3-4			
5	-11.315	-19.564	320.40782	-58.4	8.6	-83.6	31.2	2.24946	0.834	-91.5	68.6	38.5	33.6	29.0	8.96060	4-5			
6	-11.316	-19.926	315.56396	-56.7	8.2	-83.6	31.6	2.21529	0.849	-91.5	68.3	40.1	31.9	27.1	10.15877	5-6			
7	-11.029	-19.971	312.85223	-59.3	8.0	-82.8	31.0	2.19646	0.858	-89.6	68.2	40.1	30.9	27.3	8.81028	6-7			

JULY 31, 1964 13 HR 23 MIN 51 SEC 219 MS TAB NO 86 ATLAS PHOTO NO 86 POD SEQUENCE NO 839

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				117.980		271.04401		-9.011		-24.101		2006.499		2.465		-66.455		115.380	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.156	-19.791	312.13113	-58.9	8.3	-83.2	31.1	2.19179	0.846	-90.5	68.4	39.3	32.2	28.2	0.	1-2			
3	-11.024	-19.978	308.59779	-59.3	8.0	-82.8	31.0	2.16659	0.858	-89.6	68.2	40.1	30.9	27.3	6.84557	2-3			
4	-11.014	-19.655	313.28269	-60.9	8.4	-82.8	30.6	2.19942	0.843	-89.6	68.5	38.5	32.6	29.3	9.90933	3-4			
5	-11.306	-19.596	316.04758	-58.4	8.6	-83.6	31.2	2.21885	0.834	-91.5	68.6	38.5	33.5	29.0	8.83835	4-5			
6	-11.308	-19.933	311.27164	-56.7	8.2	-83.6	31.6	2.18525	0.849	-91.5	68.3	40.1	31.9	27.1	10.01961	5-6			
7	-11.024	-19.978	308.59779	-59.3	8.0	-82.8	31.0	2.16659	0.858	-89.6	68.2	40.1	30.9	27.3	8.69017	6-7			

JULY 31, 1964 13 HR 23 MIN 52 SEC 099 MS TAB NO 87 ATLAS PHOTO NO 87 POD SEQUENCE NO 841

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				115.900		267.24712		-9.031		-24.057		2002.702		2.467		-66.427		115.373	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.150	-19.800	307.82280	-58.9	8.3	-83.2	31.1	2.16154	0.846	-90.5	68.4	39.3	32.2	28.2	0.	1-2			
3	-11.020	-19.984	304.33944	-59.3	8.0	-82.8	31.0	2.13669	0.858	-89.6	68.2	40.1	30.9	27.3	6.75046	2-3			
4	-11.014	-19.656	308.95789	-60.9	8.4	-82.8	30.6	2.16906	0.843	-89.6	68.5	38.5	32.6	29.3	9.77171	3-4			
5	-11.298	-19.608	311.68540	-58.4	8.6	-83.6	31.2	2.18821	0.834	-91.5	68.6	38.5	33.5	29.0	8.71599	4-5			
6	-11.299	-19.941	306.97536	-56.7	8.2	-83.6	31.6	2.15509	0.849	-91.5	68.3	40.1	31.9	27.1	9.88034	5-6			
7	-11.020	-19.984	304.33944	-59.3	8.0	-82.8	31.0	2.13669	0.858	-89.6	68.2	40.1	30.9	27.3	8.56987	6-7			

JULY 31, 1964 13 HR 23 MIN 54 SEC 579 MS TAB NO 88 ATLAS PHOTO NO 88 POD SEQUENCE NO 843

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				114.220		263.44803		-9.052		-24.014		1998.903		2.469		-66.398		115.365	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.143	-19.809	303.51032	-58.9	8.3	-83.2	31.1	2.13125	0.846	-90.5	68.4	39.3	32.2	28.2	0.	1-2			
3	-11.015	-19.991	300.07693	-59.3	8.0	-82.8	31.0	2.10677	0.858	-89.6	68.2	40.1	30.9	27.3	6.65530	2-3			
4	-11.010	-19.667	304.62889	-60.9	8.4	-82.8	30.6	2.13887	0.843	-89.6	68.5	38.5	32.6	29.3	9.63398	3-4			
5	-11.290	-19.620	307.31505	-58.4	8.6	-83.6	31.2	2.15754	0.834	-91.5	68.6	38.5	33.5	29.0	8.59343	4-5			
6	-11.291	-19.948	302.67442	-56.7	8.2	-83.6	31.6	2.12450	0.849	-91.5	68.3	40.1	31.9	27.1	9.74097	5-6			
7	-11.015	-19.991	300.07693	-59.3	8.0	-82.8	31.0	2.10677	0.858	-89.6	68.2	40.1	30.9	27.3	8.44946	6-7			

JULY 31, 1964 13 HR 23 MIN 56 SEC 259 MS TAB NO 89 ATLAS PHOTO NO 89 POD SEQUENCE NO 845

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				112.540		259.64705		-9.072		-23.970		1995.102		2.470		-66.369		115.358	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.137	-19.819	299.19400	-58.9	8.3	-83.2	31.1	2.10045	0.847	-90.5	68.4	39.3	32.2	28.2	0.	1-2			
3	-11.011	-19.998	295.81061	-59.3	8.0	-82.8	31.0	2.07681	0.858	-89.6	68.2	40.1	30.9	27.3	6.56009	2-3			
4	-11.005	-19.679	301.27807	-60.9	8.4	-82.8	30.6	2.10825	0.843	-89.6	68.5	38.5	32.6	29.2	9.49614	3-4			
5	-11.281	-19.632	302.94285	-58.4	8.6	-83.6	31.2	2.12685	0.834	-91.5	68.6	38.5	33.5	29.0	8.47096	4-5			
6	-11.282	-19.955	298.37067	-56.8	8.2	-83.6	31.6	2.09468	0.850	-91.5	68.3	40.1	31.9	27.1	9.60149	5-6			
7	-11.011	-19.998	295.81061	-59.3	8.0	-82.8	31.0	2.07681	0.858	-89.6	68.2	40.1	30.9	27.3	8.32914	6-7			

JULY 31, 1964 13 HR 23 MIN 57 SEC 939 MS TAB NO 90 ATLAS PHOTO NO 90 POD SEQUENCE NO 847

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				110.860		255.84381		-9.093		-23.926		1991.299		2.472		-66.340		115.350	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-11.131	-19.828	294.87342	-58.9	8.3	-83.2	31.1	2.07061	0.847	-90.5	68.4	39.3	32.2	28.2	0.	1-2			
3	-11.006	-19.005	291.54004	-59.3	8.0	-82.8	31.0	2.04683	0.858	-89.6	68.2	40.1	30.9	27.3	6.46477	2-3			
4	-11.001	-19.690	295.95900	-60.8	8.4	-82.8	30.6	2.07780	0.843	-89.6	68.5	38.5	32.6	29.2	9.35820	3-4			
5	-11.273	-19.644	298.56638	-58.4	8.6	-83.6	31.2	2.09612	0.834	-91.5	68.6	38.5	33.5	29.0	8.34810	4-5			
6	-11.274	-19.963	294.06217	-56.8	8.2	-83.6	31.6	2.06444	0.850	-91.5	68.3	40.1	31.8	27.1	9.46188	5-6			
7	-11.006	-19.005	291.54004	-59.3	8.0	-82.8	31.0	2.04683	0.858	-89.6	68.2	40.1	30.9	27.3	8.20862	6-7			

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JULY 31, 1964 13 HR 23 MIN 59 SEC 619 MS

TAB NO 91

ATLAS PHOTO NO 91

POD SEQUENCE NO 849

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				109.180	252.03856	-9.113	-23.882	1987.494	2.474	-66.311	115.343		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.124	-19.838	290.54820	-58.9	8.3	-83.2	31.1	2.04023	0.847	-90.5	68.4 39.3 32.1 28.1	0.	1- 2
3	-11.001	-20.012	287.26491	-59.3	8.0	-82.8	31.0	2.01662	0.858	-89.6	68.2 40.1 30.9 27.3	6.36936	2- 3
4	-10.996	-19.701	291.61725	-60.8	8.4	-82.8	30.6	2.04732	0.843	-89.6	68.5 38.5 32.5 29.2	9.22008	3- 4
5	-11.264	-19.656	294.18523	-58.4	8.6	-83.6	31.2	2.06536	0.834	-91.5	68.6 38.5 33.5 29.0	8.22533	4- 5
6	-11.265	-19.970	289.74905	-56.8	8.2	-83.6	31.6	2.03416	0.850	-91.5	68.2 40.1 31.8 27.0	9.32215	5- 6
7	-11.001	-20.012	287.26491	-59.3	8.0	-82.8	31.0	2.01682	0.858	-89.6	68.2 40.1 30.9 27.3	8.08789	6- 7

JULY 31, 1964 13 HR 24 MIN 1 SEC 299 MS

TAB NO 92

ATLAS PHOTO NO 92

POD SEQUENCE NO 851

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				107.501	248.23131	-9.134	-23.838	1983.687	2.476	-66.281	115.335		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.118	-19.857	286.21833	-58.9	8.3	-83.2	31.1	2.00963	0.847	-90.5	68.4 39.3 32.1 28.1	0.	1- 2
3	-10.997	-20.019	282.96516	-59.3	8.0	-82.8	31.0	1.98677	0.859	-89.6	68.2 40.1 30.9 27.3	6.27382	2- 3
4	-10.992	-19.713	287.27082	-60.8	8.4	-82.8	30.6	2.01680	0.843	-89.6	68.5 38.5 32.5 29.2	9.08184	3- 4
5	-11.255	-19.669	289.79937	-58.4	8.6	-83.6	31.2	2.03457	0.834	-91.5	68.5 38.5 33.5 29.0	8.10224	4- 5
6	-11.257	-19.978	285.43134	-56.8	8.2	-83.6	31.6	2.00384	0.850	-91.5	68.2 40.1 31.8 27.0	9.18226	5- 6
7	-10.997	-20.019	282.96516	-59.3	8.0	-82.8	31.0	1.98677	0.859	-89.6	68.2 40.1 30.9 27.3	7.96706	6- 7

JULY 31, 1964 13 HR 24 MIN 2 SEC 979 MS

TAB NO 93

ATLAS PHOTO NO 93

POD SEQUENCE NO 853

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				105.821	244.42191	-9.155	-23.794	1979.877	2.478	-66.252	115.328		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.111	-19.857	281.68436	-58.9	8.3	-83.2	31.1	1.97940	0.847	-90.5	68.3 39.3 32.1 28.1	0.	1- 2
3	-10.992	-20.026	278.70134	-59.3	8.0	-82.8	31.0	1.95669	0.859	-89.6	68.2 40.1 30.9 27.3	6.17822	2- 3
4	-10.987	-19.725	282.92029	-60.8	8.4	-82.8	30.6	1.98626	0.843	-89.6	68.5 38.5 32.5 29.2	8.94347	3- 4
5	-11.247	-19.681	285.40943	-58.4	8.6	-83.6	31.2	2.00375	0.835	-91.5	68.5 38.5 33.4 28.9	7.97916	4- 5
6	-11.248	-19.986	281.10952	-56.8	8.2	-83.6	31.6	1.97350	0.850	-91.5	68.2 40.1 31.8 27.0	9.04224	5- 6
7	-10.992	-20.026	278.70134	-59.3	8.0	-82.8	31.0	1.95669	0.859	-89.6	68.2 40.1 30.9 27.3	7.84622	6- 7

JULY 31, 1964 13 HR 24 MIN 4 SEC 659 MS

TAB NO 94

ATLAS PHOTO NO 94

POD SEQUENCE NO 855

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				104.141	240.61032	-9.175	-23.749	1976.066	2.480	-66.223	115.320		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.105	-19.867	277.54822	-58.9	8.3	-83.2	31.1	1.94893	0.847	-90.5	68.3 39.3 32.1 28.1	0.	1- 2
3	-10.983	-20.033	274.41337	-59.3	8.0	-82.8	31.0	1.92659	0.859	-89.6	68.2 40.1 30.8 27.3	6.08252	2- 3
4	-10.982	-19.737	278.56559	-60.8	8.4	-82.8	30.7	1.95569	0.844	-89.6	68.4 38.5 32.5 29.2	8.80498	3- 4
5	-11.238	-19.694	281.01531	-58.4	8.6	-83.6	31.2	1.97290	0.835	-91.5	68.5 38.5 33.4 28.9	7.85607	4- 5
6	-11.240	-19.993	276.78355	-56.8	8.2	-83.6	31.6	1.94313	0.850	-91.5	68.2 40.1 31.8 27.0	8.90212	5- 6
7	-10.987	-20.033	274.41337	-59.3	8.0	-82.8	31.0	1.92659	0.859	-89.6	68.2 40.1 30.8 27.3	7.72517	6- 7

JULY 31, 1964 13 HR 24 MIN 6 SEC 339 MS

TAB NO 95

ATLAS PHOTO NO 95

POD SEQUENCE NO 857

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				102.461	236.79671	-9.196	-23.705	1972.252	2.482	-66.193	115.312		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.098	-19.876	273.20407	-58.9	8.3	-83.2	31.1	1.91844	0.847	-90.5	68.3 39.3 32.1 28.1	0.	1- 2
3	-10.983	-20.040	270.12141	-59.3	8.0	-82.8	31.0	1.89646	0.859	-89.6	68.2 40.1 30.8 27.3	5.98678	2- 3
4	-10.978	-19.748	274.20688	-60.8	8.4	-82.8	30.7	1.92509	0.844	-89.6	68.4 38.5 32.5 29.2	8.66640	3- 4
5	-11.230	-19.766	276.61716	-58.4	8.6	-83.6	31.2	1.94202	0.835	-91.5	68.5 38.5 33.4 28.9	7.73279	4- 5
6	-11.231	-20.001	272.45356	-56.8	8.2	-83.6	31.6	1.91274	0.850	-91.5	68.2 40.1 31.8 27.0	8.76191	5- 6
7	-10.983	-20.040	270.12141	-59.3	8.0	-82.8	31.0	1.89646	0.859	-89.6	68.2 40.1 30.8 27.3	7.60402	6- 7

JULY 31, 1964 13 HR 24 MIN 8 SEC 18 MS

TAB NO 96

ATLAS PHOTO NO 96

POD SEQUENCE NO 859

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				100.781	232.98109	-9.217	-23.660	1968.436	2.484	-66.163	115.305		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.092	-19.886	268.85796	-58.9	8.3	-83.2	31.1	1.88793	0.847	-90.5	68.3 39.3 32.1 28.1	0.	1- 2
3	-10.978	-20.047	265.82550	-59.3	8.0	-82.8	31.0	1.86630	0.859	-89.6	68.1 40.1 30.8 27.3	5.89091	2- 3
4	-10.973	-19.760	269.84422	-60.8	8.4	-82.8	30.7	1.89446	0.844	-89.6	68.4 38.5 32.5 29.2	8.52770	3- 4
5	-11.221	-19.719	272.21506	-58.4	8.6	-83.6	31.2	1.91112	0.835	-91.5	68.5 38.5 33.4 28.9	7.60939	4- 5
6	-11.222	-20.009	268.11964	-56.8	8.1	-83.6	31.6	1.88231	0.850	-91.5	68.2 40.1 31.8 27.0	8.62158	5- 6
7	-10.978	-20.047	265.82550	-59.3	8.0	-82.8	31.0	1.86630	0.859	-89.6	68.1 40.1 30.8 27.3	7.48277	6- 7

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TAB NO 97														ATLAS PHOTO NO 97				POD SEQUENCE NO 861			
JULY 31,1964 13 HR 24 MIN 9 SEC 698 MS																					
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ			
				99.101		229.16310		-9.238		-23.615		1964.618		2.486		-66.134		115.297			
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-11.085	-19.896	264.50746	-58.9	8.3	-83.2	31.1	1.85738	0.847	-90.5	68.3	39.3	32.1	28.1	0.	1-2					
3	-10.973	-20.054	261.52520	-59.3	8.0	-82.8	31.0	1.83610	0.859	-89.6	68.1	40.1	30.8	27.2	5.79508	2-3					
4	-10.968	-19.772	265.47716	-60.8	8.4	-82.8	30.7	1.86380	0.844	-89.6	68.4	38.5	32.5	29.1	8.38892	3-4					
5	-11.212	-19.731	267.80854	-58.4	8.6	-83.6	31.2	1.88018	0.835	-91.5	68.5	38.5	33.4	28.9	7.48589	4-5					
6	-11.214	-20.017	263.78129	-56.8	8.1	-83.6	31.6	1.85185	0.850	-91.5	68.2	40.1	31.8	27.0	8.48115	5-6					
7	-10.973	-20.054	261.52520	-59.3	8.0	-82.8	31.0	1.83610	0.859	-89.6	68.1	40.1	30.8	27.2	7.36142	6-7					
TAB NO 98														ATLAS PHOTO NO 98				POD SEQUENCE NO 863			
JULY 31,1964 13 HR 24 MIN 11 SEC 378 MS																					
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ			
				97.421		225.34322		-9.259		-23.570		1960.799		2.488		-66.104		115.289			
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-11.078	-19.906	260.15306	-58.9	8.3	-83.2	31.1	1.82680	0.847	-90.5	68.3	39.3	32.1	28.1	0.	1-2					
3	-10.969	-20.062	257.22104	-59.3	8.0	-82.8	31.0	1.80589	0.859	-89.6	68.1	40.1	30.8	27.2	5.69911	2-3					
4	-10.964	-19.784	261.10622	-60.8	8.4	-82.8	30.7	1.83311	0.844	-89.6	68.4	38.5	32.5	29.1	8.25001	3-4					
5	-11.204	-19.744	263.39815	-58.4	8.6	-83.6	31.2	1.84922	0.835	-91.5	68.5	38.5	33.4	28.9	7.36230	4-5					
6	-11.205	-20.025	259.43909	-56.8	8.1	-83.6	31.6	1.82137	0.850	-91.5	68.2	40.1	31.8	27.0	8.34060	5-6					
7	-10.969	-20.062	257.22104	-59.3	8.0	-82.8	31.0	1.80589	0.859	-89.6	68.1	40.1	30.8	27.2	7.24007	6-7					
TAB NO 99														ATLAS PHOTO NO 99				POD SEQUENCE NO 865			
JULY 31,1964 13 HR 24 MIN 13 SEC 58 MS																					
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ			
				95.741		221.52121		-9.280		-23.524		1956.977		2.490		-66.074		115.281			
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-11.072	-19.916	255.79451	-58.9	8.3	-83.2	31.1	1.79619	0.848	-90.5	68.3	39.3	32.0	28.1	0.	1-2					
3	-10.964	-20.069	252.91274	-59.3	8.0	-82.8	31.0	1.77564	0.859	-89.6	68.1	40.1	30.8	27.2	5.60300	2-3					
4	-10.959	-19.796	256.73114	-60.8	8.4	-82.8	30.7	1.80240	0.844	-89.6	68.4	38.5	32.4	29.1	8.11100	3-4					
5	-11.195	-19.757	258.98362	-58.4	8.6	-83.6	31.2	1.81823	0.835	-91.5	68.5	38.5	33.4	28.9	7.23860	4-5					
6	-11.196	-20.033	255.09272	-56.8	8.1	-83.6	31.6	1.79086	0.850	-91.5	68.2	40.1	31.8	27.0	8.19997	5-6					
7	-10.964	-20.069	252.91274	-59.3	8.0	-82.8	31.0	1.77564	0.859	-89.6	68.1	40.1	30.8	27.2	7.11841	6-7					
TAB NO 100														ATLAS PHOTO NO 100				POD SEQUENCE NO 867			
JULY 31,1964 13 HR 24 MIN 14 SEC 738 MS																					
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ			
				94.061		217.69693		-9.302		-23.479		1953.152		2.492		-66.044		115.273			
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-11.065	-19.926	251.43160	-58.9	8.3	-83.2	31.1	1.76556	0.848	-90.5	68.3	39.3	32.0	28.1	0.	1-2					
3	-10.959	-20.076	248.60010	-59.3	8.0	-82.8	31.0	1.74536	0.859	-89.6	68.1	40.1	30.8	27.2	5.50683	2-3					
4	-10.954	-19.808	252.35165	-60.8	8.4	-82.8	30.7	1.77165	0.844	-89.6	68.4	38.5	32.4	29.1	7.97186	3-4					
5	-11.186	-19.770	254.56470	-58.4	8.6	-83.6	31.2	1.78720	0.836	-91.5	68.4	38.5	33.3	28.8	7.11480	4-5					
6	-11.187	-20.041	250.74207	-56.8	8.1	-83.6	31.6	1.76031	0.851	-91.5	68.2	40.1	31.7	27.0	8.05921	5-6					
7	-10.959	-20.076	248.60010	-59.3	8.0	-82.8	31.0	1.74536	0.859	-89.6	68.1	40.1	30.8	27.2	6.99675	6-7					
TAB NO 101														ATLAS PHOTO NO 101				POD SEQUENCE NO 869			
JULY 31,1964 13 HR 24 MIN 16 SEC 418 MS																					
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ			
				92.381		213.87057		-9.323		-23.433		1949.326		2.494		-66.013		115.265			
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-11.058	-19.936	247.06455	-58.9	8.3	-83.2	31.1	1.73489	0.848	-90.5	68.3	39.3	32.0	28.0	0.	1-2					
3	-10.954	-20.084	244.28329	-59.3	8.0	-82.8	31.0	1.71505	0.859	-89.6	68.1	40.1	30.8	27.2	5.41075	2-3					
4	-10.949	-19.821	247.96794	-60.8	8.4	-82.8	30.7	1.74088	0.844	-89.6	68.4	38.5	32.4	29.1	7.83256	3-4					
5	-11.177	-19.783	250.14164	-58.4	8.6	-83.6	31.2	1.75615	0.836	-91.5	68.4	38.5	33.3	28.8	6.99091	4-5					
6	-11.178	-20.049	246.38728	-56.8	8.1	-83.6	31.6	1.72974	0.851	-91.5	68.2	40.1	31.7	27.0	7.91833	5-6					
7	-10.954	-20.084	244.28329	-59.3	8.0	-82.8	31.0	1.71505	0.859	-89.6	68.1	40.1	30.8	27.2	6.87509	6-7					
TAB NO 102														ATLAS PHOTO NO 102				POD SEQUENCE NO 871			
JULY 31,1964 13 HR 24 MIN 18 SEC 98 MS																					
TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ			
				90.702		210.04216		-9.344		-23.387		1945.497		2.496		-65.983		115.257			
PHOTO DATA																					
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
2	-11.052	-19.946	242.69342	-58.9	8.3	-83.2	31.1	1.70420	0.848	-90.5	68.3	39.3	32.0	28.0	0.	1-2					
3	-10.949	-20.092	239.96246	-59.3	8.0	-82.8	31.0	1.68472	0.859	-89.6	68.1	40.1	30.8	27.2	5.31437	2-3					
4	-10.945	-19.833	243.58021	-60.8	8.4	-82.8	30.7	1.71007	0.844	-89.6	68.4	38.5	32.4	29.1	7.69320	3-4					
5	-11.168	-19.795	245.71451	-58.4	8.6	-83.6	31.2	1.72507	0.836	-91.5	68.4	38.5	33.3	28.8	6.86692	4-5					
6	-11.170	-20.057	242.02843	-56.8	8.1	-83.6	31.6	1.69914	0.851	-91.5	68.2	40.1	31.7	27.0	7.77733	5-6					
7	-10.949	-20.092	239.96246	-59.3	8.0	-82.8	31.0	1.68472	0.859	-89.6	68.1	40.1	30.8	27.2	6.75313	6-7					

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JULY 31, 1964 13 HR 24 MIN 19 SEC 778 MS TAB NO 103 ATLAS PHOTO NO 103 POD SEQUENCE NO 873

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		89.022	206.21161	-9.366	-23.341	1941.667	2.498	-65.953	115.249

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-11.045	-19.957	238.31808	-58.9	8.3	-83.2	31.1	1.67347	0.848	-90.5	68.2	39.3	32.0	28.0	0.
3	-10.944	-20.099	235.63742	-59.3	8.0	-82.8	31.0	1.65435	0.859	-89.6	68.1	40.1	30.8	27.2	5.21813
4	-10.940	-19.845	239.18828	-60.8	8.4	-82.8	30.7	1.67924	0.845	-89.6	68.3	38.5	32.4	29.1	7.55374
5	-11.160	-19.808	241.28317	-58.4	8.6	-83.6	31.2	1.69396	0.836	-91.5	68.4	38.5	33.3	28.8	6.74292
6	-11.161	-20.065	237.66537	-56.8	8.1	-83.6	31.6	1.68851	0.851	-91.5	68.1	40.1	31.7	26.9	7.63625
7	-10.944	-20.099	235.63742	-59.3	8.0	-82.8	31.0	1.65435	0.859	-89.6	68.1	40.1	30.8	27.2	6.63126

JULY 31, 1964 13 HR 24 MIN 21 SEC 458 MS TAB NO 104 ATLAS PHOTO NO 104 POD SEQUENCE NO 875

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		87.342	202.37878	-9.388	-23.294	1937.834	2.500	-65.922	115.241

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-11.038	-19.967	238.93839	-58.9	8.3	-83.2	31.1	1.64272	0.848	-90.5	68.2	39.3	32.0	28.0	0.
3	-10.939	-20.107	231.30803	-59.3	8.0	-82.8	31.0	1.62396	0.859	-89.6	68.1	40.1	30.8	27.2	5.12165
4	-10.935	-19.858	236.79199	-60.8	8.4	-82.8	30.7	1.64837	0.845	-89.6	68.3	38.5	32.4	29.1	7.41414
5	-11.151	-19.822	236.84746	-58.4	8.6	-83.6	31.2	1.66282	0.836	-91.5	68.4	38.5	33.3	28.8	6.61862
6	-11.152	-20.074	233.29797	-56.8	8.1	-83.6	31.6	1.63785	0.851	-91.5	68.1	40.1	31.7	26.9	7.49502
7	-10.939	-20.107	231.30803	-59.3	8.0	-82.8	31.0	1.62396	0.859	-89.6	68.1	40.1	30.8	27.2	6.50910

JULY 31, 1964 13 HR 24 MIN 23 SEC 138 MS TAB NO 105 ATLAS PHOTO NO 105 POD SEQUENCE NO 877

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		85.662	198.54378	-9.409	-23.248	1933.999	2.502	-65.891	115.233

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-11.031	-19.977	229.55446	-58.9	8.2	-83.2	31.1	1.61154	0.848	-90.5	68.2	39.3	32.0	28.0	0.
3	-10.934	-20.115	226.97442	-59.3	8.0	-82.8	31.0	1.59353	0.860	-89.6	68.1	40.1	30.8	27.2	5.02514
4	-10.930	-19.870	230.39146	-60.8	8.4	-82.8	30.7	1.61748	0.845	-89.6	68.3	38.5	32.4	29.0	7.27445
5	-11.142	-19.835	232.40751	-58.4	8.6	-83.6	31.2	1.63164	0.836	-91.5	68.4	38.5	33.3	28.8	6.49421
6	-11.143	-20.082	228.92631	-56.8	8.1	-83.6	31.6	1.60716	0.851	-91.5	68.1	40.1	31.7	26.9	7.35371
7	-10.934	-20.115	226.97442	-59.3	8.0	-82.8	31.0	1.59353	0.860	-89.6	68.1	40.1	30.8	27.2	6.38683

JULY 31, 1964 13 HR 24 MIN 24 SEC 817 MS TAB NO 106 ATLAS PHOTO NO 106 POD SEQUENCE NO 879

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		83.982	194.70676	-9.431	-23.201	1930.162	2.504	-65.861	115.225

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-11.024	-19.988	225.16643	-58.9	8.2	-83.2	31.1	1.58112	0.848	-90.5	68.2	39.3	32.0	28.0	0.
3	-10.929	-20.122	222.63674	-59.3	8.0	-82.8	31.1	1.56308	0.860	-89.6	68.1	40.1	30.7	27.2	4.92857
4	-10.925	-19.883	225.98865	-60.8	8.4	-82.8	30.7	1.58656	0.845	-89.6	68.3	38.5	32.3	29.0	7.13463
5	-11.133	-19.848	227.96347	-58.4	8.5	-83.6	31.2	1.60044	0.837	-91.5	68.4	38.5	33.2	28.8	6.36971
6	-11.134	-20.091	224.55057	-56.8	8.1	-83.6	31.6	1.57644	0.851	-91.5	68.1	40.1	31.7	26.9	7.21229
7	-10.929	-20.122	222.63674	-59.3	8.0	-82.8	31.1	1.56308	0.860	-89.6	68.1	40.1	30.7	27.2	6.26665

JULY 31, 1964 13 HR 24 MIN 26 SEC 497 MS TAB NO 107 ATLAS PHOTO NO 107 POD SEQUENCE NO 881

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		82.302	190.86754	-9.453	-23.154	1926.323	2.506	-65.830	115.216

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-11.018	-19.998	220.77410	-58.9	8.2	-83.2	31.1	1.55028	0.848	-90.5	68.2	39.3	32.0	28.0	0.
3	-10.924	-20.130	218.29476	-59.3	8.0	-82.8	31.1	1.53259	0.860	-89.6	68.1	40.1	30.7	27.2	4.83195
4	-10.920	-19.895	221.57795	-60.8	8.4	-82.8	30.7	1.55560	0.845	-89.6	68.3	38.5	32.3	29.0	6.99473
5	-11.124	-19.861	223.51513	-58.4	8.5	-83.6	31.2	1.56921	0.837	-91.5	68.3	38.5	33.2	28.8	6.24520
6	-11.125	-20.099	220.17052	-56.8	8.1	-83.6	31.6	1.54569	0.851	-91.4	68.1	40.1	31.7	26.9	7.07079
7	-10.924	-20.130	218.29476	-59.3	8.0	-82.8	31.1	1.53259	0.860	-89.6	68.1	40.1	30.7	27.2	6.14217

JULY 31, 1964 13 HR 24 MIN 28 SEC 177 MS TAB NO 108 ATLAS PHOTO NO 108 POD SEQUENCE NO 883

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		80.622	187.02602	-9.475	-23.107	1922.481	2.508	-65.799	115.208

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-11.011	-20.009	216.37736	-58.9	8.2	-83.2	31.1	1.51941	0.849	-90.5	68.2	39.3	31.9	28.0	0.
3	-10.919	-20.138	213.94839	-59.3	8.0	-82.8	31.1	1.50208	0.860	-89.6	68.1	40.1	30.7	27.2	4.73515
4	-10.915	-19.908	217.16461	-60.8	8.4	-82.8	30.7	1.52462	0.845	-89.6	68.3	38.5	32.3	29.0	6.85470
5	-11.115	-19.874	219.06236	-58.4	8.5	-83.6	31.2	1.53795	0.837	-91.5	68.3	38.5	33.2	28.7	6.12059
6	-11.116	-20.108	215.78606	-56.8	8.1	-83.6	31.6	1.51491	0.851	-91.4	68.1	40.1	31.7	26.9	6.92915
7	-10.919	-20.138	213.94839	-59.3	8.0	-82.8	31.1	1.50208	0.860	-89.6	68.1	40.1	30.7	27.2	6.01969

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JULY 31, 1964 13 HR 24 MIN 29 SEC 857 MS

TAB NO 109 ATLAS PHOTO NO 109 POD SEQUENCE NO 885

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
78.942		183.18240	-9.497	-23.060	1918.638	2.510	-65.768	115.200

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.004	-20.020	211.97455	-58.9	8.2	-83.2	31.1	1.48849	0.849	-90.5	68.2	39.3	31.9	28.0	0.	1-2
3	-10.914	-20.146	209.59607	-59.3	8.0	-82.8	31.1	1.47152	0.860	-89.6	68.0	40.1	30.7	27.1	4.63831	2-3
4	-10.910	-19.920	212.74521	-60.7	8.4	-82.8	30.7	1.49359	0.845	-89.6	68.3	38.5	32.3	29.0	6.71446	3-4
5	-11.105	-19.888	214.60342	-58.4	8.5	-83.6	31.2	1.50665	0.837	-91.5	68.3	38.5	33.2	28.7	5.99566	4-5
6	-11.107	-20.116	211.39558	-56.8	8.1	-83.6	31.5	1.48408	0.852	-91.4	68.1	40.1	31.6	26.9	6.78729	5-6
7	-10.914	-20.146	209.59607	-59.3	8.0	-82.8	31.1	1.47152	0.860	-89.6	68.0	40.1	30.7	27.1	5.89699	6-7

JULY 31, 1964 13 HR 24 MIN 31 SEC 537 MS

TAB NO 110 ATLAS PHOTO NO 110 POD SEQUENCE NO 887

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
77.262		179.33655	-9.519	-23.012	1914.792	2.512	-65.736	115.191

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.937	-20.030	207.56641	-58.9	8.2	-83.2	31.1	1.45753	0.849	-90.5	68.2	39.3	31.9	27.9	0.	1-2
3	-10.909	-20.154	205.23848	-59.2	8.0	-82.8	31.1	1.44093	0.860	-89.6	68.0	40.1	30.7	27.1	4.54131	2-3
4	-10.905	-19.933	208.32047	-60.7	8.4	-82.8	30.8	1.46253	0.845	-89.6	68.2	38.5	32.3	29.0	6.57403	3-4
5	-11.096	-19.901	210.13908	-58.4	8.5	-83.6	31.2	1.47531	0.837	-91.5	68.3	38.5	33.2	28.7	5.87072	4-5
6	-11.097	-20.125	206.99978	-56.8	8.1	-83.6	31.5	1.45322	0.852	-91.4	68.1	40.1	31.6	26.9	6.65527	5-6
7	-10.909	-20.154	205.23848	-59.2	8.0	-82.8	31.1	1.44093	0.860	-89.6	68.0	40.1	30.7	27.1	5.77418	6-7

JULY 31, 1964 13 HR 24 MIN 33 SEC 217 MS

TAB NO 111 ATLAS PHOTO NO 111 POD SEQUENCE NO 889

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
75.582		175.48866	-9.541	-22.964	1910.944	2.514	-65.705	115.163

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.989	-20.041	203.15622	-58.9	8.2	-83.1	31.1	1.42655	0.849	-90.5	68.2	39.3	31.9	27.9	0.	1-2
3	-10.904	-20.163	200.87687	-59.2	7.9	-82.8	31.1	1.41031	0.860	-89.6	68.0	40.1	30.7	27.1	4.44421	2-3
4	-10.900	-19.946	203.89169	-60.7	8.4	-82.7	30.8	1.43144	0.846	-89.6	68.2	38.5	32.3	29.0	6.43354	3-4
5	-11.087	-19.915	205.67071	-58.4	8.5	-83.5	31.2	1.44394	0.837	-91.5	68.3	38.5	33.2	28.7	5.74558	4-5
6	-11.088	-20.134	202.59942	-56.8	8.1	-83.6	31.5	1.42233	0.852	-91.4	68.1	40.1	31.6	26.9	6.50316	5-6
7	-10.904	-20.163	200.87687	-59.2	7.9	-82.8	31.1	1.41031	0.860	-89.6	68.0	40.1	30.7	27.1	5.65117	6-7

JULY 31, 1964 13 HR 24 MIN 34 SEC 897 MS

TAB NO 112 ATLAS PHOTO NO 112 POD SEQUENCE NO 891

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
73.903		171.63847	-9.563	-22.917	1907.094	2.516	-65.674	115.174

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.982	-20.052	198.73772	-58.9	8.2	-83.1	31.1	1.39554	0.849	-90.5	68.1	39.3	31.9	27.9	0.	1-2
3	-10.899	-20.171	196.51094	-59.2	7.9	-82.8	31.1	1.37966	0.860	-89.6	68.0	40.1	30.7	27.1	4.34706	2-3
4	-10.895	-19.959	199.45859	-60.7	8.4	-82.7	30.8	1.40031	0.846	-89.6	68.2	38.5	32.3	28.9	6.29291	3-4
5	-11.078	-19.929	201.19801	-58.4	8.5	-83.5	31.2	1.41253	0.837	-91.5	68.3	38.5	33.1	28.7	5.62035	4-5
6	-11.079	-20.143	198.19574	-56.8	8.1	-83.6	31.5	1.39142	0.852	-91.4	68.1	40.1	31.6	26.9	6.36093	5-6
7	-10.894	-20.171	196.51094	-59.2	7.9	-82.8	31.1	1.37966	0.860	-89.6	68.0	40.1	30.7	27.1	5.52805	6-7

JULY 31, 1964 13 HR 24 MIN 36 SEC 577 MS

TAB NO 113 ATLAS PHOTO NO 113 POD SEQUENCE NO 893

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
72.223		167.78609	-9.585	-22.868	1903.241	2.518	-65.642	115.166

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.975	-20.063	194.31694	-58.9	8.2	-83.1	31.1	1.36450	0.849	-90.5	68.1	39.3	31.9	27.9	0.	1-2
3	-10.893	-20.179	192.14074	-59.2	7.9	-82.8	31.1	1.34897	0.860	-89.6	68.0	40.1	30.7	27.1	4.24986	2-3
4	-10.890	-19.972	195.02123	-60.7	8.4	-82.7	30.8	1.36916	0.846	-89.6	68.2	38.5	32.2	28.9	6.15220	3-4
5	-11.069	-19.943	196.72107	-58.4	8.5	-83.5	31.2	1.38110	0.838	-91.5	68.3	38.5	33.1	28.7	5.49510	4-5
6	-11.070	-20.152	193.78730	-56.8	8.1	-83.6	31.5	1.36047	0.852	-91.4	68.1	40.1	31.6	26.8	6.21861	5-6
7	-10.893	-20.179	192.14074	-59.2	7.9	-82.8	31.1	1.34897	0.860	-89.6	68.0	40.1	30.7	27.1	5.40494	6-7

JULY 31, 1964 13 HR 24 MIN 38 SEC 257 MS

TAB NO 114 ATLAS PHOTO NO 114 POD SEQUENCE NO 895

TRAJECTORY DATA

SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ
70.543		163.93150	-9.608	-22.820	1899.387	2.520	-65.610	115.157

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.968	-20.074	189.89199	-58.9	8.2	-83.1	31.1	1.33342	0.849	-90.5	68.1	39.3	31.9	27.9	0.	1-2
3	-10.888	-20.188	187.76635	-59.2	7.9	-82.8	31.1	1.31826	0.860	-89.6	68.0	40.1	30.7	27.1	4.15257	2-3
4	-10.884	-19.985	190.57968	-60.7	8.4	-82.7	30.8	1.33798	0.846	-89.6	68.2	38.5	32.2	28.9	6.01136	3-4
5	-11.053	-19.956	192.23992	-58.4	8.5	-83.5	31.2	1.34964	0.838	-91.5	68.2	38.5	33.1	28.6	5.36966	4-5
6	-11.060	-20.161	189.37466	-56.8	8.1	-83.6	31.5	1.32949	0.852	-91.4	68.0	40.1	31.6	26.8	6.07618	5-6
7	-10.888	-20.188	187.76635	-59.2	7.9	-82.8	31.1	1.31826	0.860	-89.6	68.0	40.1	30.7	27.1	5.28162	6-7

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JULY 31, 1964 13 HR 24 MIN 39 SEC 937 MS TAB NO 115 ATLAS PHOTO NO 115 POD SEQUENCE NO 897

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				68.863	160.07484	-9.630	-22.772	1895.530	2.522	-65.579	115.148
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.961	-20.085	183.46286	-58.9	8.2	-83.1	31.1	1.30232	0.849	-90.5	68.1 39.3 31.8 27.9 0. 1- 2
3	-10.883	-20.196	183.36782	-59.2	7.9	-82.8	31.1	1.28752	0.860	-89.6	68.0 40.1 30.7 27.1 4.05523 2- 3
4	-10.879	-19.999	186.13400	-60.7	8.4	-82.7	30.8	1.30677	0.846	-89.6	68.2 38.5 32.2 28.9 5.87045 3- 4
5	-11.050	-19.970	187.75464	-58.4	8.5	-83.5	31.2	1.31815	0.838	-91.5	68.2 38.5 33.1 28.6 5.24412 4- 5
6	-11.051	-20.170	184.95787	-56.8	8.1	-83.6	31.5	1.29848	0.852	-91.4	68.0 40.1 31.6 26.8 5.93368 5- 6
7	-10.883	-20.196	183.38782	-59.2	7.9	-82.8	31.1	1.28752	0.860	-89.6	68.0 40.1 30.7 27.1 5.15829 6- 7

JULY 31, 1964 13 HR 24 MIN 41 SEC 616 MS TAB NO 116 ATLAS PHOTO NO 116 POD SEQUENCE NO 899

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				67.183	156.21576	-9.653	-22.723	1891.671	2.524	-65.547	115.140
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.953	-20.096	181.02921	-58.8	8.2	-83.1	31.2	1.27119	0.850	-90.5	68.1 39.3 31.8 27.9 0. 1- 2
3	-10.877	-20.204	179.00476	-59.2	7.9	-82.8	31.1	1.25755	0.861	-89.6	68.0 40.1 30.6 27.1 3.95773 2- 3
4	-10.874	-20.012	181.68380	-60.7	8.4	-82.7	30.8	1.27552	0.846	-89.6	68.2 38.5 32.2 28.9 5.72941 3- 4
5	-11.040	-19.984	183.26484	-58.4	8.5	-83.5	31.2	1.28663	0.838	-91.5	68.2 38.5 33.1 28.6 5.11837 4- 5
6	-11.041	-20.179	180.53655	-56.8	8.1	-83.6	31.5	1.26744	0.852	-91.4	68.0 40.1 31.5 26.8 5.79106 5- 6
7	-10.877	-20.204	179.00476	-59.2	7.9	-82.8	31.1	1.25675	0.861	-89.6	68.0 40.1 30.6 27.1 5.03457 6- 7

JULY 31, 1964 13 HR 24 MIN 43 SEC 296 MS TAB NO 117 ATLAS PHOTO NO 117 POD SEQUENCE NO 901

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				65.503	152.35452	-9.675	-22.674	1887.810	2.526	-65.515	115.131
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.946	-20.108	176.59137	-58.8	8.2	-83.1	31.2	1.24003	0.850	-90.5	68.1 39.3 31.8 27.8 0. 1- 2
3	-10.872	-20.213	174.61752	-59.2	7.9	-82.8	31.1	1.22595	0.861	-89.6	68.0 40.1 30.6 27.1 3.86018 2- 3
4	-10.868	-20.025	177.22960	-60.7	8.3	-82.7	30.8	1.24425	0.846	-89.6	68.2 38.5 32.2 28.9 5.58828 3- 4
5	-11.031	-19.988	178.77085	-58.4	8.5	-83.5	31.2	1.25508	0.838	-91.5	68.2 38.5 33.1 28.6 4.99272 4- 5
6	-11.032	-20.188	176.11104	-56.8	8.1	-83.6	31.5	1.23637	0.853	-91.4	68.0 40.1 31.5 26.8 5.64832 5- 6
7	-10.872	-20.213	174.61752	-59.2	7.9	-82.8	31.1	1.22595	0.861	-89.6	68.0 40.1 30.6 27.1 4.91104 6- 7

JULY 31, 1964 13 HR 24 MIN 44 SEC 976 MS TAB NO 118 ATLAS PHOTO NO 118 POD SEQUENCE NO 903

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				63.823	148.49110	-9.698	-22.625	1883.946	2.528	-65.482	115.122
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.939	-20.119	172.15247	-58.8	8.2	-83.1	31.2	1.20886	0.850	-90.5	68.1 39.3 31.8 27.8 0. 1- 2
3	-10.866	-20.221	170.22902	-59.2	7.9	-82.8	31.1	1.19514	0.861	-89.6	68.0 40.1 30.6 27.0 3.76284 2- 3
4	-10.863	-20.038	172.77404	-60.7	8.3	-82.7	30.8	1.21297	0.847	-89.6	68.1 38.5 32.2 28.8 5.44724 3- 4
5	-11.022	-20.012	174.27599	-58.4	8.5	-83.5	31.2	1.22353	0.836	-91.5	68.2 38.5 33.0 28.6 4.86690 4- 5
6	-11.022	-20.197	171.68436	-56.8	8.1	-83.6	31.5	1.20530	0.853	-91.4	68.0 40.1 31.5 26.8 5.50570 5- 6
7	-10.866	-20.221	170.22902	-59.2	7.9	-82.8	31.1	1.19514	0.861	-89.6	68.0 40.1 30.6 27.0 4.78743 6- 7

JULY 31, 1964 13 HR 24 MIN 46 SEC 656 MS TAB NO 119 ATLAS PHOTO NO 119 POD SEQUENCE NO 905

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				62.143	144.62541	-9.721	-22.575	1880.081	2.531	-65.450	115.113
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.931	-20.130	167.71030	-58.8	8.2	-83.1	31.2	1.17766	0.850	-90.5	68.1 39.3 31.8 27.8 0. 1- 2
3	-10.861	-20.230	165.83722	-59.2	7.9	-82.8	31.1	1.16430	0.861	-89.6	68.0 40.1 30.6 27.0 3.66537 2- 3
4	-10.857	-20.051	168.31547	-60.7	8.3	-82.7	30.8	1.18167	0.847	-89.6	68.1 38.5 32.2 28.8 5.230617 3- 4
5	-11.012	-20.026	169.77797	-58.4	8.5	-83.5	31.2	1.19195	0.839	-91.5	68.2 38.5 33.0 28.6 4.74108 4- 5
6	-11.013	-20.206	167.25441	-56.8	8.1	-83.6	31.5	1.17420	0.853	-91.4	68.0 40.1 31.5 26.8 5.36305 5- 6
7	-10.861	-20.230	165.83722	-59.2	7.9	-82.8	31.1	1.16430	0.861	-89.6	68.0 40.1 30.6 27.0 4.66373 6- 7

JULY 31, 1964 13 HR 24 MIN 48 SEC 336 MS TAB NO 120 ATLAS PHOTO NO 120 POD SEQUENCE NO 907

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				60.463	140.75735	-9.744	-22.526	1876.213	2.533	-65.418	115.104
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.924	-20.141	163.26341	-58.8	8.2	-83.1	31.2	1.14644	0.850	-90.5	68.1 39.3 31.8 27.8 0. 1- 2
3	-10.855	-20.238	161.44073	-59.2	7.9	-82.8	31.1	1.13344	0.861	-89.6	68.0 40.1 30.6 27.0 3.56774 2- 3
4	-10.852	-20.064	163.85218	-60.7	8.3	-82.7	30.8	1.15034	0.847	-89.6	68.1 38.5 32.1 28.8 5.16499 3- 4
5	-11.002	-20.039	165.27521	-58.4	8.5	-83.5	31.2	1.16033	0.839	-91.5	68.2 38.5 33.0 28.6 4.61515 4- 5
6	-11.003	-20.215	162.81974	-56.8	8.1	-83.6	31.5	1.14306	0.853	-91.4	68.0 40.1 31.5 26.8 5.22028 5- 6
7	-10.855	-20.238	161.44073	-59.2	7.9	-82.8	31.1	1.13344	0.861	-89.6	68.0 40.1 30.6 27.0 4.53982 6- 7

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JULY 31, 1964 13 HR 24 MIN 50 SEC 16 MS

TAB NO 121 ATLAS PHOTO NO 121 POD SEQUENCE NO 909

TRAJECTORY DATA

		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
		58.783	136.88710	-9.767	-22.476	1872.342	2.535	-65.385	115.095

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.917	-20.152	158.81197	-58.8	8.2	-83.1	31.2	1.11518	0.850	-90.5	68.0	39.3	31.8	27.8	0.	1-2
3	-10.850	-20.246	157.03969	-59.2	7.9	-82.8	31.1	1.10254	0.861	-89.6	67.9	40.1	30.6	27.0	3.47022	2-3
4	-10.847	-20.078	159.38433	-60.7	8.3	-82.7	30.8	1.11897	0.847	-89.6	68.1	38.5	32.1	28.8	5.02367	3-4
5	-10.993	-20.053	160.76789	-58.4	8.5	-83.5	31.2	1.12869	0.839	-91.5	68.1	38.5	33.0	28.5	4.48914	4-5
6	-10.994	-20.224	158.38052	-58.9	8.1	-83.6	31.5	1.11190	0.853	-91.4	68.0	40.1	31.5	26.8	5.07741	5-6
7	-10.850	-20.246	157.03969	-59.2	7.9	-82.8	31.1	1.10254	0.861	-89.6	67.9	40.1	30.6	27.0	4.41600	6-7

JULY 31, 1964 13 HR 24 MIN 51 SEC 696 MS

TAB NO 122 ATLAS PHOTO NO 122 POD SEQUENCE NO 911

TRAJECTORY DATA

		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
		57.104	133.01471	-9.790	-22.426	1868.470	2.537	-65.352	115.086

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.909	-20.163	154.35605	-58.8	8.2	-83.1	31.2	1.08389	0.850	-90.5	68.0	39.3	31.8	27.8	0.	1-2
3	-10.844	-20.255	152.63419	-59.2	7.9	-82.8	31.1	1.07161	0.861	-89.6	67.9	40.1	30.6	27.0	3.37242	2-3
4	-10.841	-20.091	154.91202	-60.7	8.3	-82.7	30.8	1.08757	0.847	-89.6	68.1	38.5	32.1	28.8	4.88223	3-4
5	-10.983	-20.067	156.25608	-58.4	8.5	-83.5	31.2	1.09701	0.839	-91.5	68.1	38.5	33.0	28.5	4.36291	4-5
6	-10.984	-20.233	153.93685	-56.9	8.1	-83.6	31.5	1.08070	0.853	-91.4	68.0	40.1	31.5	26.8	4.93440	5-6
7	-10.844	-20.255	152.63419	-59.2	7.9	-82.8	31.1	1.07161	0.861	-89.6	67.9	40.1	30.6	27.0	4.29189	6-7

JULY 31, 1964 13 HR 24 MIN 52 SEC 536 MS

TAB NO 123 ATLAS PHOTO NO 123 POD SEQUENCE NO 912

TRAJECTORY DATA

		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
		56.264	131.07785	-9.801	-22.401	1866.533	2.538	-65.336	115.082

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.905	-20.169	152.12653	-58.8	8.2	-83.1	31.2	1.06824	0.850	-90.5	68.0	39.3	31.8	27.8	0.	1-2
3	-10.841	-20.259	150.42989	-59.2	7.9	-82.8	31.1	1.05613	0.861	-89.6	67.9	40.1	30.6	27.0	3.32358	2-3
4	-10.838	-20.098	152.67429	-60.7	8.3	-82.7	30.8	1.07186	0.847	-89.6	68.1	38.5	32.1	28.8	4.81147	3-4
5	-10.978	-20.074	153.99862	-58.4	8.5	-83.5	31.2	1.08117	0.839	-91.5	68.1	38.5	33.0	28.5	4.29979	4-5
6	-10.979	-20.238	151.71344	-56.9	8.1	-83.6	31.5	1.06509	0.853	-91.4	68.0	40.1	31.5	26.8	4.86285	5-6
7	-10.841	-20.259	150.42989	-59.2	7.9	-82.8	31.1	1.05613	0.861	-89.6	67.9	40.1	30.6	27.0	4.22983	6-7

JULY 31, 1964 13 HR 24 MIN 53 SEC 376 MS

TAB NO 124 ATLAS PHOTO NO 124 POD SEQUENCE NO 913

TRAJECTORY DATA

		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
		55.424	129.14006	-9.813	-22.376	1864.595	2.539	-65.320	115.077

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.902	-20.174	149.89545	-58.8	8.2	-83.1	31.2	1.05257	0.850	-90.5	68.0	39.3	31.7	27.8	0.	1-2
3	-10.838	-20.264	148.22404	-59.2	7.9	-82.8	31.1	1.04064	0.861	-89.6	67.9	40.1	30.6	27.0	3.27462	2-3
4	-10.835	-20.104	150.43502	-60.7	8.3	-82.7	30.8	1.05614	0.847	-89.6	68.1	38.5	32.1	28.8	4.74068	3-4
5	-10.974	-20.081	151.73958	-58.4	8.5	-83.5	31.2	1.06531	0.839	-91.5	68.1	38.5	33.0	28.5	4.23658	4-5
6	-10.974	-20.243	149.48848	-56.9	8.0	-83.6	31.5	1.04947	0.853	-91.4	68.0	40.1	31.5	26.7	4.79127	5-6
7	-10.838	-20.264	148.22404	-59.2	7.9	-82.8	31.1	1.04064	0.861	-89.6	67.9	40.1	30.6	27.0	4.16767	6-7

JULY 31, 1964 13 HR 24 MIN 54 SEC 216 MS

TAB NO 125 ATLAS PHOTO NO 125 POD SEQUENCE NO 914

TRAJECTORY DATA

		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
		54.584	127.20196	-9.824	-22.351	1862.657	2.540	-65.303	115.073

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.898	-20.180	147.66352	-58.8	8.2	-83.1	31.2	1.03690	0.850	-90.5	68.0	39.3	31.7	27.8	0.	1-2
3	-10.836	-20.268	146.01731	-59.2	7.9	-82.8	31.1	1.02515	0.861	-89.6	67.9	40.1	30.6	27.0	3.22570	2-3
4	-10.833	-20.111	148.19489	-60.7	8.3	-82.7	30.8	1.04041	0.847	-89.6	68.1	38.5	32.1	28.8	4.66987	3-4
5	-10.969	-20.088	149.47970	-58.4	8.5	-83.5	31.2	1.04944	0.839	-91.5	68.1	38.5	33.0	28.5	4.17346	4-5
6	-10.970	-20.247	147.26266	-56.9	8.0	-83.6	31.5	1.03384	0.853	-91.4	68.0	40.1	31.5	26.7	4.71966	5-6
7	-10.836	-20.266	146.01731	-59.2	7.9	-82.8	31.1	1.02515	0.861	-89.6	67.9	40.1	30.6	27.0	4.10551	6-7

JULY 31, 1964 13 HR 24 MIN 55 SEC 56 MS

TAB NO 126 ATLAS PHOTO NO 126 POD SEQUENCE NO 915

TRAJECTORY DATA

		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
		53.744	125.26311	-9.836	-22.326	1860.718	2.541	-65.287	115.068

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.894	-20.186	145.43014	-58.8	8.2	-83.1	31.2	1.02121	0.851	-90.5	68.0	39.3	31.7	27.8	0.	1-2
3	-10.833	-20.272	143.80917	-59.2	7.9	-82.8	31.1	1.00965	0.861	-89.6	67.9	40.1	30.6	27.0	3.17670	2-3
4	-10.830	-20.118	145.95331	-60.7	8.3	-82.7	30.8	1.02468	0.847	-89.6	68.1	38.5	32.1	28.8	4.59900	3-4
5	-10.964	-20.096	147.21838	-58.4	8.5	-83.5	31.2	1.03356	0.839	-91.5	68.1	38.5	32.9	28.5	4.11024	4-5
6	-10.965	-20.252	145.03542	-56.9	8.0	-83.6	31.5	1.01821	0.853	-91.4	68.0	40.1	31.5	26.7	4.64800	5-6
7	-10.833	-20.272	143.80917	-59.2	7.9	-82.8	31.1	1.00965	0.861	-89.6	67.9	40.1	30.6	27.0	4.04335	6-7

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JULY 31, 1964 13 HR 24 MIN 55 SEC 896 MS TAB NO 127 ATLAS PHOTO NO 127 POD SEQUENCE NO 916

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				52.904	123.32385	-9.848	-22.300	1858.779	2.542	-65.270	115.063
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.890	-20.191	143.19582	-58.8	8.2	-83.1	31.2	1.00552	0.851	-90.5	68.0 39.3 31.7 27.8 0. 1-2
3	-10.830	-20.277	141.60009	-59.2	7.9	-82.8	31.1	0.99414	0.861	-89.6	67.9 40.1 30.6 27.0 3.12780 2-3
4	-10.827	-20.124	143.71080	-60.7	8.3	-82.7	30.8	1.00893	0.847	-89.6	68.1 38.5 32.1 28.8 4.52812 3-4
5	-10.959	-20.103	144.95611	-58.4	8.5	-83.5	31.2	1.01768	0.839	-91.5	68.1 38.5 32.9 28.5 4.04693 4-5
6	-10.960	-20.257	142.80723	-56.9	8.0	-83.6	31.5	1.00257	0.853	-91.4	67.9 40.1 31.4 26.7 4.57634 5-6
7	-10.830	-20.277	141.60009	-59.2	7.9	-82.8	31.1	0.99414	0.861	-89.6	67.9 40.1 30.6 27.0 3.98118 6-7

JULY 31, 1964 13 HR 24 MIN 56 SEC 736 MS TAB NO 128 ATLAS PHOTO NO 128 POD SEQUENCE NO 917

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				52.064	121.38382	-9.859	-22.275	1856.839	2.543	-65.254	115.059
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.886	-20.197	140.96008	-58.8	8.2	-83.1	31.2	0.98982	0.851	-90.5	68.0 39.3 31.7 27.8 0. 1-2
3	-10.827	-20.281	139.38958	-59.2	7.9	-82.8	31.1	0.97862	0.861	-89.6	67.9 40.1 30.6 27.0 3.07879 2-3
4	-10.824	-20.131	141.46685	-60.7	8.3	-82.7	30.8	0.99318	0.847	-89.6	68.1 38.5 32.1 28.8 4.55718 3-4
5	-10.954	-20.110	142.69242	-58.4	8.5	-83.5	31.2	1.00179	0.839	-91.5	68.1 38.5 32.9 28.5 3.98371 4-5
6	-10.955	-20.261	140.57760	-56.9	8.0	-83.6	31.5	0.98691	0.853	-91.4	67.9 40.1 31.4 26.7 4.50464 5-6
7	-10.827	-20.281	139.38958	-59.2	7.9	-82.8	31.1	0.97862	0.861	-89.6	67.9 40.1 30.6 27.0 3.91892 6-7

JULY 31, 1964 13 HR 24 MIN 57 SEC 575 MS TAB NO 129 ATLAS PHOTO NO 129 POD SEQUENCE NO 918

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				51.224	119.44354	-9.871	-22.250	1854.899	2.545	-65.237	115.054
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.883	-20.203	138.72356	-58.8	8.2	-83.1	31.2	0.97412	0.851	-90.5	68.0 39.3 31.7 27.8 0. 1-2
3	-10.824	-20.285	137.17829	-59.2	7.9	-82.8	31.1	0.96310	0.861	-89.6	67.9 40.1 30.6 27.0 3.02975 2-3
4	-10.821	-20.138	139.22213	-60.7	8.3	-82.7	30.9	0.97742	0.847	-89.6	68.0 38.5 32.1 28.7 4.38626 3-4
5	-10.949	-20.117	140.42794	-58.4	8.5	-83.5	31.2	0.98589	0.840	-91.5	68.1 38.5 32.9 28.5 3.92029 4-5
6	-10.950	-20.266	138.34720	-56.9	8.0	-83.6	31.5	0.97125	0.853	-91.4	67.9 40.1 31.4 26.7 4.43293 5-6
7	-10.824	-20.285	137.17829	-59.2	7.9	-82.8	31.1	0.96310	0.861	-89.6	67.9 40.1 30.6 27.0 3.85665 6-7

JULY 31, 1964 13 HR 24 MIN 58 SEC 415 MS TAB NO 130 ATLAS PHOTO NO 130 POD SEQUENCE NO 919

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				50.384	117.50229	-9.883	-22.224	1852.958	2.546	-65.220	115.050
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.879	-20.208	136.48536	-58.8	8.2	-83.1	31.2	0.95840	0.851	-90.5	68.0 39.3 31.7 27.7 0. 1-2
3	-10.821	-20.290	134.96533	-59.2	7.9	-82.8	31.1	0.94756	0.861	-89.6	67.9 40.1 30.5 27.0 2.98076 2-3
4	-10.819	-20.145	136.97573	-60.7	8.3	-82.7	30.9	0.96145	0.848	-89.6	68.0 38.5 32.1 28.7 4.31527 3-4
5	-10.944	-20.124	138.16180	-58.4	8.5	-83.5	31.2	0.96998	0.840	-91.5	68.1 38.5 32.9 28.5 3.85707 4-5
6	-10.945	-20.271	136.11514	-56.9	8.0	-83.6	31.5	0.95558	0.853	-91.4	67.9 40.1 31.4 26.7 4.36115 5-6
7	-10.821	-20.290	134.96533	-59.2	7.9	-82.8	31.1	0.94756	0.861	-89.6	67.9 40.1 30.5 27.0 3.79449 6-7

JULY 31, 1964 13 HR 24 MIN 59 SEC 255 MS TAB NO 131 ATLAS PHOTO NO 131 POD SEQUENCE NO 920

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				49.544	115.56090	-9.895	-22.199	1851.016	2.547	-65.204	115.045
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.875	-20.214	134.24674	-58.8	8.2	-83.1	31.2	0.94268	0.851	-90.5	68.0 39.3 31.7 27.7 0. 1-2
3	-10.818	-20.294	132.75194	-59.2	7.9	-82.8	31.1	0.93202	0.861	-89.6	67.9 40.1 30.5 27.0 2.93171 2-3
4	-10.816	-20.152	134.72892	-60.7	8.3	-82.7	30.9	0.94587	0.848	-89.6	68.0 38.5 32.1 28.7 4.24429 3-4
5	-10.939	-20.131	135.89523	-58.4	8.4	-83.5	31.2	0.95407	0.840	-91.5	68.1 38.5 32.9 28.5 3.79365 4-5
6	-10.940	-20.275	133.88263	-56.9	8.0	-83.6	31.5	0.93991	0.853	-91.4	67.9 40.1 31.4 26.7 4.28935 5-6
7	-10.818	-20.294	132.75194	-59.2	7.9	-82.8	31.1	0.93202	0.861	-89.6	67.9 40.1 30.5 27.0 3.73202 6-7

JULY 31, 1964 13 HR 25 MIN 0 SEC 95 MS TAB NO 132 ATLAS PHOTO NO 132 POD SEQUENCE NO 921

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				48.704	113.61855	-9.906	-22.173	1849.074	2.548	-65.187	115.040
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.871	-20.220	132.00665	-58.8	8.2	-83.1	31.2	0.92695	0.851	-90.5	68.0 39.3 31.7 27.7 0. 1-2
3	-10.815	-20.299	130.53710	-59.2	7.9	-82.8	31.1	0.91647	0.861	-89.6	67.9 40.1 30.5 27.0 2.88258 2-3
4	-10.813	-20.158	132.48065	-60.7	8.3	-82.7	30.9	0.93009	0.848	-89.6	68.0 38.5 32.1 28.7 4.17327 3-4
5	-10.934	-20.138	133.62721	-58.4	8.4	-83.5	31.2	0.93815	0.840	-91.5	68.1 38.5 32.9 28.5 3.73033 4-5
6	-10.935	-20.280	131.64868	-56.9	8.0	-83.6	31.5	0.92423	0.854	-91.4	67.9 40.1 31.4 26.7 4.21759 5-6
7	-10.815	-20.299	130.53710	-59.2	7.9	-82.8	31.1	0.91647	0.861	-89.6	67.9 40.1 30.5 27.0 3.66965 6-7

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JULY 31, 1964 13 HR 25 MIN 0 SEC 935 MS TAB NO 133 ATLAS PHOTO NO 133 POD SEQUENCE NO 922

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				47.864	111.67595	-9.918	-22.147	1847.131	2.549	-65.170	115.036		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.867	-20.226	129.76574	-58.8	8.2	-83.1	31.2	0.91122	0.851	-90.5	68.0 39.3 31.7	27.7	0.
3	-10.813	-20.303	128.32143	-59.2	7.9	-82.8	31.1	0.90091	0.861	-89.6	67.9 40.1 30.5	27.0	2.83356 2- 3
4	-10.810	-20.165	130.23158	-60.7	8.3	-82.7	30.9	0.91430	0.848	-89.6	68.0 38.5 32.0	28.7	4.10224 3- 4
5	-10.429	-20.145	131.35839	-58.4	8.4	-83.5	31.2	0.92222	0.840	-91.5	68.1 38.5 32.9	28.5	3.66681 4- 5
6	-10.930	-20.285	129.41390	-56.9	8.0	-83.6	31.5	0.90854	0.854	-91.4	67.9 40.1 31.4	26.7	4.14578 5- 6
7	-10.813	-20.303	128.32143	-59.2	7.9	-82.8	31.1	0.90091	0.861	-89.6	67.9 40.1 30.5	27.0	3.60748 6- 7

JULY 31, 1964 13 HR 25 MIN 1 SEC 775 MS TAB NO 134 ATLAS PHOTO NO 134 POD SEQUENCE NO 923

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				47.024	109.73256	-9.930	-22.122	1845.188	2.550	-65.154	115.031		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.863	-20.232	127.52339	-58.8	8.2	-83.1	31.2	0.89547	0.851	-90.5	68.0 39.3 31.7	27.7	0.
3	-10.810	-20.307	126.10433	-59.2	7.9	-82.8	31.1	0.88535	0.862	-89.6	67.9 40.1 30.5	27.0	2.78442 2- 3
4	-10.807	-20.172	127.98164	-60.7	8.3	-82.7	30.9	0.89650	0.848	-89.6	68.0 38.5 32.0	28.7	4.03116 3- 4
5	-10.925	-20.153	129.08609	-58.4	8.4	-83.5	31.2	0.90628	0.840	-91.5	68.0 38.5 32.9	28.4	3.60339 4- 5
6	-10.925	-20.290	127.17764	-56.9	8.0	-83.6	31.5	0.89284	0.854	-91.4	67.9 40.1 31.4	26.7	4.07392 5- 6
7	-10.810	-20.307	126.10433	-59.2	7.9	-82.8	31.1	0.88535	0.862	-89.6	67.9 40.1 30.5	27.0	3.54492 6- 7

JULY 31, 1964 13 HR 25 MIN 2 SEC 615 MS TAB NO 135 ATLAS PHOTO NO 135 POD SEQUENCE NO 924

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				46.184	107.78868	-9.942	-22.096	1843.244	2.551	-65.137	115.026		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.859	-20.237	125.27993	-58.8	8.2	-83.1	31.2	0.87972	0.851	-90.5	68.0 39.3 31.7	27.7	0.
3	-10.807	-20.312	123.88609	-59.2	7.9	-82.8	31.1	0.86977	0.862	-89.6	67.9 40.1 30.5	27.0	2.73537 2- 3
4	-10.804	-20.179	125.72939	-60.6	8.3	-82.7	30.9	0.88269	0.848	-89.6	68.0 38.5 32.0	28.7	3.96005 3- 4
5	-10.920	-20.160	126.81670	-58.4	8.4	-83.5	31.2	0.89033	0.840	-91.5	68.0 38.5 32.9	28.4	3.53987 4- 5
6	-10.920	-20.294	124.94032	-56.9	8.0	-83.6	31.5	0.87713	0.854	-91.4	67.9 40.1 31.4	26.7	4.00205 5- 6
7	-10.807	-20.312	123.88609	-59.2	7.9	-82.8	31.1	0.86977	0.862	-89.6	67.9 40.1 30.5	27.0	3.48264 6- 7

JULY 31, 1964 13 HR 25 MIN 3 SEC 455 MS TAB NO 136 ATLAS PHOTO NO 136 POD SEQUENCE NO 925

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				45.344	105.84413	-9.954	-22.070	1841.299	2.552	-65.120	115.021		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.856	-20.243	123.03516	-58.8	8.2	-83.1	31.2	0.86396	0.851	-90.5	68.0 39.3 31.7	27.7	0.
3	-10.804	-20.316	121.66658	-59.2	7.9	-82.8	31.1	0.85419	0.862	-89.6	67.9 40.1 30.5	27.0	2.68613 2- 3
4	-10.801	-20.186	123.47645	-60.6	8.3	-82.7	30.9	0.86668	0.848	-89.6	68.0 38.5 32.0	28.7	3.88891 3- 4
5	-10.915	-20.167	124.54399	-58.4	8.4	-83.5	31.2	0.87438	0.840	-91.5	68.0 38.5 32.9	28.4	3.47634 4- 5
6	-10.915	-20.299	122.70169	-56.9	8.0	-83.6	31.5	0.86142	0.854	-91.4	67.9 40.1 31.4	26.7	3.93010 5- 6
7	-10.804	-20.316	121.66658	-59.2	7.9	-82.8	31.1	0.85419	0.862	-89.6	67.9 40.1 30.5	27.0	3.42007 6- 7

JULY 31, 1964 13 HR 25 MIN 4 SEC 295 MS TAB NO 137 ATLAS PHOTO NO 137 POD SEQUENCE NO 926

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				44.504	103.89515	-9.965	-22.044	1839.354	2.553	-65.103	115.017		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.852	-20.249	120.78935	-58.8	8.2	-83.1	31.2	0.84818	0.851	-90.5	67.9 39.3 31.7	27.7	0.
3	-10.801	-20.321	119.44601	-59.2	7.9	-82.8	31.1	0.83860	0.862	-89.6	67.9 40.1 30.5	27.0	2.63705 2- 3
4	-10.798	-20.193	121.22244	-60.6	8.3	-82.7	30.9	0.85105	0.848	-89.6	68.0 38.5 32.0	28.7	3.81774 3- 4
5	-10.910	-20.174	122.27024	-58.4	8.4	-83.5	31.2	0.85841	0.840	-91.5	68.0 38.5 32.9	28.4	3.41282 4- 5
6	-10.910	-20.304	120.46198	-56.9	8.0	-83.6	31.5	0.84569	0.854	-91.4	67.9 40.1 31.4	26.7	3.85817 5- 6
7	-10.801	-20.321	119.44601	-59.2	7.9	-82.8	31.1	0.83860	0.862	-89.6	67.9 40.1 30.5	27.0	3.35760 6- 7

JULY 31, 1964 13 HR 25 MIN 5 SEC 135 MS TAB NO 138 ATLAS PHOTO NO 138 POD SEQUENCE NO 927

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				43.664	101.95351	-9.977	-22.018	1837.409	2.554	-65.086	115.012		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.848	-20.255	118.54220	-58.8	8.2	-83.1	31.2	0.83241	0.851	-90.5	67.9 39.3 31.7	27.7	0.
3	-10.798	-20.325	117.22412	-59.2	7.9	-82.8	31.1	0.82300	0.862	-89.6	67.9 40.1 30.5	27.0	2.58779 2- 3
4	-10.795	-20.200	118.96711	-60.6	8.3	-82.7	30.9	0.83522	0.848	-89.6	68.0 38.5 32.0	28.7	3.74654 3- 4
5	-10.905	-20.182	119.99514	-58.4	8.4	-83.5	31.2	0.84244	0.840	-91.5	68.0 38.5 32.9	28.4	3.34930 4- 5
6	-10.905	-20.309	118.22094	-56.9	8.0	-83.6	31.5	0.82996	0.854	-91.4	67.9 40.1 31.4	26.7	3.78618 5- 6
7	-10.798	-20.325	117.22412	-59.2	7.9	-82.8	31.1	0.82300	0.862	-89.6	67.9 40.1 30.5	27.0	3.29493 6- 7

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JULY 31, 1964 13 HR 25 MIN 5 SEC 975 MS TAB NO 139 ATLAS PHOTO NO 139 POD SEQUENCE NO 928

TRAJECTORY DATA				SFC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				42.824		100.00737	-9.989	-21.992	1835.463	2.556	-65.069	115.007				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.844	-20.261	116.29394	-58.8	8.2	-83.1	31.2	C.81662	C.851	-90.5	67.9	39.3	31.7	27.7	0.	1-2
3	-10.795	-20.330	115.00113	-59.2	7.9	-82.8	31.1	C.80740	C.862	-89.6	67.9	40.1	30.5	26.9	2.53856	2-3
4	-10.793	-20.207	116.71068	-60.6	8.3	-82.7	30.9	C.81938	C.848	-89.6	68.0	38.5	32.0	28.7	3.67529	3-4
5	-10.900	-20.189	117.71896	-58.4	8.4	-83.5	31.2	C.82646	C.840	-91.5	68.0	38.5	32.8	28.4	3.28568	4-5
6	-10.900	-20.314	115.97884	-56.9	8.0	-83.6	31.5	C.81422	C.854	-91.4	67.9	40.1	31.4	26.7	3.71417	5-6
7	-10.795	-20.330	115.00113	-59.2	7.9	-82.8	31.1	C.80740	C.862	-89.6	67.9	40.1	30.5	26.9	3.23256	6-7

JULY 31, 1964 13 HR 25 MIN 6 SEC 815 MS TAB NO 140 ATLAS PHOTO NO 140 POD SEQUENCE NO 929

TRAJECTORY DATA				SFC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				41.984		98.06050	-10.001	-21.966	1833.516	2.557	-65.053	115.002				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.840	-20.267	114.04429	-58.8	8.2	-83.1	31.2	C.80082	C.851	-90.5	67.9	39.3	31.6	27.7	0.	1-2
3	-10.792	-20.335	112.77675	-59.2	7.9	-82.8	31.1	C.79178	C.862	-89.6	67.9	40.1	30.5	26.9	2.48933	2-3
4	-10.790	-20.213	114.45265	-60.6	8.3	-82.7	30.9	C.80352	C.848	-89.6	68.0	38.5	32.0	28.7	3.60403	3-4
5	-10.895	-20.196	115.44138	-58.4	8.4	-83.5	31.2	C.81047	C.840	-91.5	68.0	38.5	32.8	28.4	3.22205	4-5
6	-10.895	-20.319	113.73532	-56.9	8.0	-83.6	31.4	C.79847	C.854	-91.4	67.9	40.1	31.4	26.7	3.64213	5-6
7	-10.792	-20.335	112.77675	-59.2	7.9	-82.8	31.1	C.79178	C.862	-89.6	67.9	40.1	30.5	26.9	3.16988	6-7

JULY 31, 1964 13 HR 25 MIN 7 SEC 655 MS TAB NO 141 ATLAS PHOTO NO 141 POD SEQUENCE NO 930

TRAJECTORY DATA				SFC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				41.145		96.11333	-10.013	-21.940	1831.569	2.558	-65.036	114.998				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.836	-20.273	111.79374	-58.8	8.2	-83.1	31.2	C.78502	C.851	-90.5	67.9	39.3	31.6	27.7	0.	1-2
3	-10.789	-20.339	110.55147	-59.2	7.9	-82.8	31.1	C.77616	C.862	-89.6	67.9	40.1	30.5	26.9	2.44014	2-3
4	-10.787	-20.220	112.19414	-60.6	8.3	-82.7	30.9	C.78767	C.848	-89.6	68.0	38.5	32.0	28.7	3.53274	3-4
5	-10.890	-20.204	113.16289	-58.4	8.4	-83.5	31.2	C.79447	C.840	-91.5	68.0	38.5	32.8	28.4	3.15832	4-5
6	-10.890	-20.324	111.49092	-56.9	8.0	-83.6	31.4	C.78271	C.854	-91.4	67.9	40.1	31.4	26.7	3.57007	5-6
7	-10.789	-20.339	110.55147	-59.2	7.9	-82.8	31.1	C.77616	C.862	-89.6	67.9	40.1	30.5	26.9	3.10730	6-7

JULY 31, 1964 13 HR 25 MIN 8 SEC 495 MS TAB NO 142 ATLAS PHOTO NO 142 POD SEQUENCE NO 931

TRAJECTORY DATA				SFC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				40.305		94.16525	-10.025	-21.914	1829.621	2.559	-65.019	114.993				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.832	-20.279	109.54160	-58.8	8.2	-83.1	31.2	C.76920	C.851	-90.5	67.9	39.3	31.6	27.7	0.	1-2
3	-10.786	-20.344	108.32460	-59.2	7.9	-82.8	31.1	C.76052	C.862	-89.6	67.8	40.1	30.5	26.9	2.39081	2-3
4	-10.784	-20.227	109.93380	-60.6	8.3	-82.7	30.9	C.77180	C.848	-89.6	68.0	38.5	32.0	28.7	3.46140	3-4
5	-10.885	-20.211	110.68279	-58.4	8.4	-83.5	31.2	C.77847	C.840	-91.5	68.0	38.5	32.8	28.4	3.09470	4-5
6	-10.885	-20.328	109.24490	-56.9	8.0	-83.6	31.4	C.76694	C.854	-91.4	67.9	40.1	31.4	26.7	3.49795	5-6
7	-10.786	-20.344	108.32460	-59.2	7.9	-82.8	31.1	C.76052	C.862	-89.6	67.8	40.1	30.5	26.9	3.04463	6-7

JULY 31, 1964 13 HR 25 MIN 9 SEC 335 MS TAB NO 143 ATLAS PHOTO NO 143 POD SEQUENCE NO 932

TRAJECTORY DATA				SFC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				39.465		92.21686	-10.037	-21.888	1827.672	2.560	-65.002	114.988				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.828	-20.285	107.28854	-58.8	8.2	-83.1	31.2	C.75338	C.851	-90.5	67.9	39.3	31.6	27.7	0.	1-2
3	-10.783	-20.348	106.09683	-59.2	7.9	-82.8	31.1	C.74468	C.862	-89.6	67.8	40.1	30.5	26.9	2.34153	2-3
4	-10.781	-20.234	107.67257	-60.6	8.3	-82.7	30.9	C.75592	C.848	-89.6	68.0	38.5	32.0	28.7	3.39084	3-4
5	-10.880	-20.218	108.66179	-58.4	8.4	-83.5	31.2	C.76245	C.840	-91.5	68.0	38.5	32.8	28.4	3.03086	4-5
6	-10.880	-20.333	106.99800	-56.9	8.0	-83.6	31.4	C.75117	C.854	-91.4	67.9	40.1	31.4	26.7	3.42582	5-6
7	-10.783	-20.348	106.09683	-59.2	7.9	-82.8	31.1	C.74468	C.862	-89.6	67.8	40.1	30.5	26.9	2.98205	6-7

JULY 31, 1964 13 HR 25 MIN 10 SEC 175 MS TAB NO 144 ATLAS PHOTO NO 144 POD SEQUENCE NO 933

TRAJECTORY DATA				SFC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				38.625		90.26761	-10.049	-21.862	1825.723	2.561	-64.984	114.983				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.824	-20.290	105.93391	-58.8	8.2	-83.1	31.2	C.73755	C.852	-90.5	67.9	39.3	31.6	27.7	0.	1-2
3	-10.780	-20.353	103.86748	-59.2	7.9	-82.8	31.1	C.72923	C.862	-89.6	67.8	40.1	30.5	26.9	2.29223	2-3
4	-10.778	-20.242	105.40975	-60.6	8.3	-82.7	30.9	C.74004	C.848	-89.6	67.9	38.5	32.0	28.7	3.31865	3-4
5	-10.874	-20.226	106.31920	-58.4	8.4	-83.5	31.2	C.74643	C.840	-91.5	68.0	38.5	32.8	28.4	2.96713	4-5
6	-10.875	-20.338	104.74950	-56.9	8.0	-83.6	31.4	C.73539	C.854	-91.4	67.9	40.1	31.4	26.7	3.35363	5-6
7	-10.780	-20.353	103.86748	-59.2	7.9	-82.8	31.1	C.72923	C.862	-89.6	67.8	40.1	30.5	26.9	2.91927	6-7

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TAB NO 145																	ATLAS PHOTO NO 145					POD SEQUENCE NO 934																																		
JULY 31,1964 13 HR 25 MIN 11 SEC 15 MS																																																								
TRAJECTORY DATA																	SEC TO IMPACT					ALT					LAT					LON					R					V					PTH					AZ				
																	37.785					88.31812					-10.061					-21.835					1823.773					2.562					-64.967					114.978				
PHOTO DATA																																																								
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																																								
2	-10.820	-20.297	102.77849	-58.8	8.2	-83.1	31.2	0.72171	0.852	-90.5	67.9	39.3	31.6	27.7	0.	1-2																																								
3	-10.777	-20.358	101.63734	-59.2	7.9	-82.8	31.1	0.71357	0.862	-89.6	67.8	40.1	30.5	26.9	2.24286	2-3																																								
4	-10.775	-20.249	103.14615	-60.6	8.3	-82.7	30.9	0.72415	0.848	-89.6	67.9	38.5	32.0	28.6	3.24720	3-4																																								
5	-10.869	-20.233	104.03583	-58.4	8.4	-83.5	31.2	0.73040	0.841	-91.5	68.0	38.5	32.8	28.4	2.90321	4-5																																								
6	-10.870	-20.343	102.50022	-56.9	8.0	-83.6	31.4	0.71959	0.854	-91.4	67.9	40.1	31.3	26.7	3.28144	5-6																																								
7	-10.777	-20.358	101.63734	-59.2	7.9	-82.8	31.1	0.71357	0.862	-89.6	67.8	40.1	30.5	26.9	2.85649	6-7																																								
TAB NO 146																	ATLAS PHOTO NO 146																	POD SEQUENCE NO 935																						
JULY 31,1964 13 HR 25 MIN 11 SEC 855 MS																																																								
TRAJECTORY DATA																	SEC TO IMPACT					ALT					LAT					LON					R					V					PTH					AZ				
																	36.945					86.36772					-10.073					-21.809					1821.823					2.563					-64.950					114.973				
PHOTO DATA																																																								
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																																								
2	-10.816	-20.303	100.52143	-58.8	8.2	-83.1	31.2	0.70586	0.852	-90.5	67.9	39.3	31.6	27.7	0.	1-2																																								
3	-10.774	-20.362	99.40558	-59.2	7.9	-82.8	31.1	0.69750	0.862	-89.6	67.8	40.1	30.5	26.9	2.19348	2-3																																								
4	-10.772	-20.256	100.88092	-60.6	8.3	-82.7	30.9	0.70824	0.849	-89.6	67.9	38.5	32.0	28.6	3.17576	3-4																																								
5	-10.864	-20.240	101.75084	-58.4	8.4	-83.5	31.2	0.71435	0.841	-91.5	68.0	38.5	32.8	28.4	2.83948	4-5																																								
6	-10.865	-20.348	100.24931	-56.9	8.0	-83.6	31.4	0.70379	0.854	-91.4	67.8	40.1	31.3	26.7	3.20920	5-6																																								
7	-10.774	-20.362	99.40558	-59.2	7.9	-82.8	31.1	0.69750	0.862	-89.6	67.8	40.1	30.5	26.9	2.79371	6-7																																								
TAB NO 147																	ATLAS PHOTO NO 147																	POD SEQUENCE NO 936																						
JULY 31,1964 13 HR 25 MIN 12 SEC 695 MS																																																								
TRAJECTORY DATA																	SEC TO IMPACT					ALT					LAT					LON					R					V					PTH					AZ				
																	36.105					84.41689					-10.086					-21.783					1819.872					2.564					-64.933					114.968				
PHOTO DATA																																																								
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																																								
2	-10.812	-20.309	98.26332	-58.8	8.2	-83.1	31.2	0.69001	0.852	-90.5	67.9	39.3	31.6	27.7	0.	1-2																																								
3	-10.771	-20.367	97.17276	-59.2	7.9	-82.8	31.1	0.68223	0.862	-89.6	67.8	40.1	30.5	26.9	2.14415	2-3																																								
4	-10.769	-20.263	98.61463	-60.6	8.3	-82.7	30.9	0.69233	0.849	-89.6	67.9	38.5	32.0	28.6	3.10427	3-4																																								
5	-10.859	-20.248	99.46478	-58.4	8.4	-83.5	31.2	0.69830	0.841	-91.5	67.9	38.5	32.8	28.4	2.77565	4-5																																								
6	-10.860	-20.353	97.99735	-56.9	8.0	-83.6	31.4	0.68798	0.854	-91.4	67.8	40.1	31.3	26.6	3.13694	5-6																																								
7	-10.771	-20.367	97.17276	-59.2	7.9	-82.8	31.1	0.68223	0.862	-89.6	67.8	40.1	30.5	26.9	2.73092	6-7																																								
TAB NO 148																	ATLAS PHOTO NO 148																	POD SEQUENCE NO 937																						
JULY 31,1964 13 HR 25 MIN 13 SEC 535 MS																																																								
TRAJECTORY DATA																	SEC TO IMPACT					ALT					LAT					LON					R					V					PTH					AZ				
																	35.265					82.46544					-10.098					-21.756					1817.921					2.566					-64.916					114.963				
PHOTO DATA																																																								
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																																								
2	-10.808	-20.315	96.00394	-58.8	8.2	-83.1	31.2	0.67414	0.852	-90.5	67.9	39.3	31.6	27.7	0.	1-2																																								
3	-10.768	-20.372	94.93869	-59.2	7.9	-82.8	31.1	0.66654	0.862	-89.6	67.8	40.1	30.5	26.9	2.09466	2-3																																								
4	-10.766	-20.270	96.34707	-60.6	8.3	-82.7	30.9	0.67641	0.849	-89.6	67.9	38.5	32.0	28.6	3.03273	3-4																																								
5	-10.854	-20.255	97.17745	-58.4	8.4	-83.5	31.2	0.68225	0.841	-91.5	67.9	38.5	32.8	28.4	2.71171	4-5																																								
6	-10.855	-20.358	95.74411	-56.9	8.0	-83.6	31.4	0.67216	0.854	-91.4	67.8	40.1	31.3	26.6	3.06463	5-6																																								
7	-10.768	-20.372	94.93869	-59.2	7.9	-82.8	31.1	0.66654	0.862	-89.6	67.8	40.1	30.5	26.9	2.66804	6-7																																								
TAB NO 149																	ATLAS PHOTO NO 149																	POD SEQUENCE NO 938																						
JULY 31,1964 13 HR 25 MIN 14 SEC 374 MS																																																								
TRAJECTORY DATA																	SEC TO IMPACT					ALT					LAT					LON					R					V					PTH					AZ				
																	34.425					80.51358					-10.110					-21.730					1815.969					2.567					-64.899					114.959				
PHOTO DATA																																																								
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																																								
2	-10.804	-20.321	93.74326	-58.8	8.2	-83.1	31.2	0.65827	0.852	-90.5	67.9	39.3	31.6	27.6	0.	1-2																																								
3	-10.765	-20.477	92.70334	-59.2	7.9	-82.8	31.1	0.65085	0.862	-89.6	67.8	40.1	30.5	26.9	2.04523	2-3																																								
4	-10.763	-20.277	94.07821	-60.6	8.3	-82.7	30.9	0.66048	0.849	-89.6	67.9	38.5	31.9	28.6	2.96116	3-4																																								
5	-10.849	-20.263	94.88883	-58.4	8.4	-83.5	31.2	0.66618	0.841	-91.5	67.9	38.5	32.8	28.3	2.64778	4-5																																								
6	-10.850	-20.363	93.48961	-56.9	8.0	-83.6	31.4	0.65634	0.854	-91.4	67.8	40.1	31.3	26.6	2.99230	5-6																																								
7	-10.765	-20.377	92.70334	-59.2	7.9	-82.8	31.1	0.65085	0.862	-89.6	67.8	40.1	30.5	26.9	2.60516	6-7																																								
TAB NO 150																	ATLAS PHOTO NO 150																	POD SEQUENCE NO 939																						
JULY 31,1964 13 HR 25 MIN 15 SEC 214 MS																																																								
TRAJECTORY DATA																	SEC TO IMPACT					ALT					LAT					LON					R					V					PTH					AZ				
																	33.585					78.56091					-10.122					-21.703					1814.016					2.568					-64.881					114.954				
PHOTO DATA																																																								
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																																								
2	-10.800	-20.327	91.48104	-58.8	8.2	-83.1	31.2	0.64238	0.852	-90.5	67.9	39.3	31.6	27.6	0.	1-2																																								
3	-10.762	-20.381	90.46644	-59.2	7.9	-82.8	31.1	0.63514	0.862	-89.6	67.8	40.1	30.5	26.9	1.99578	2-3																																								
4	-10.760	-20.284	91.80778	-60.6	8.3	-82.7	30.9	0.64454	0.849	-89.6	67.9	38.5	31.9	28.6	2.88954	3-4																																								
5	-10.844	-20.270	92.59861	-58.4	8.4	-83.5	31.2	0.65010	0.841	-91.5	67.9	38.5	32.8	28.3	2.58384	4-5																																								
6	-10.845	-20.369	91.23355	-56.9	8.0	-83.6	31.4	0.64050	0.854	-91.4	67.8	40.1	31.3	26.6	2.91990	5-6																																								
7	-10.762	-20.381	90.46644	-59.2	7.9	-82.8	31.1	0.63514	0.862	-89.6	67.8	40.1	30.5	26.9	2.54227	6-7																																								

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JULY 31, 1964 13 HR 25 MIN 16 SEC 54 MS TAB NO 151 ATLAS PHOTO NO 151 POD SEQUENCE NO 940

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		32.745	76.60783	-10.134	-21.676	1812.063	2.569	-64.864	114.949							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.796	-20.333	89.21776	-58.8	8.2	-83.1	31.2	0.62649	0.852	-90.5	67.9	39.3	31.6	27.6	0.	1-2
3	-10.758	-20.386	88.22847	-59.2	7.9	-82.8	31.1	0.61943	0.862	-89.6	67.8	40.1	30.5	26.9	1.94631	2-3
4	-10.757	-20.291	89.53631	-60.6	8.3	-82.7	30.9	0.62860	0.849	-89.6	67.9	38.5	31.9	28.6	2.81789	3-4
5	-10.839	-20.278	90.30737	-58.4	8.4	-83.5	31.2	0.63401	0.841	-91.5	67.9	38.5	32.8	28.3	2.51981	4-5
6	-10.839	-20.374	88.97644	-56.9	8.0	-83.6	31.4	0.62465	0.855	-91.4	67.8	40.1	31.3	26.6	2.84749	5-6
7	-10.758	-20.386	88.22847	-59.2	7.9	-82.8	31.1	0.61943	0.862	-89.6	67.8	40.1	30.5	26.9	2.47938	6-7

JULY 31, 1964 13 HR 25 MIN 16 SEC 894 MS TAB NO 152 ATLAS PHOTO NO 152 POD SEQUENCE NO 941

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		31.905	74.65401	-10.147	-21.650	1810.109	2.570	-64.847	114.944							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.792	-20.339	86.95306	-58.8	8.2	-83.1	31.2	0.61059	0.852	-90.5	67.9	39.3	31.6	27.6	0.	1-2
3	-10.755	-20.391	85.98911	-59.2	7.9	-82.8	31.1	0.60371	0.862	-89.6	67.8	40.1	30.4	26.9	1.89677	2-3
4	-10.754	-20.299	87.26342	-60.6	8.3	-82.7	30.9	0.61264	0.849	-89.6	67.9	38.5	31.9	28.6	2.74624	3-4
5	-10.834	-20.286	88.01470	-58.4	8.4	-83.5	31.2	0.61792	0.841	-91.5	67.9	38.5	32.7	28.3	2.45577	4-5
6	-10.834	-20.379	86.71792	-56.9	8.0	-83.6	31.4	0.60880	0.855	-91.4	67.8	40.1	31.3	26.6	2.77503	5-6
7	-10.755	-20.391	85.98911	-59.2	7.9	-82.8	31.1	0.60371	0.862	-89.6	67.8	40.1	30.4	26.9	2.41639	6-7

JULY 31, 1964 13 HR 25 MIN 17 SEC 734 MS TAB NO 153 ATLAS PHOTO NO 153 POD SEQUENCE NO 942

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		31.065	72.69965	-10.159	-21.623	1808.155	2.571	-64.829	114.939							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.788	-20.345	84.68719	-58.8	8.2	-83.1	31.2	0.59468	0.852	-90.5	67.8	39.3	31.6	27.6	0.	1-2
3	-10.752	-20.396	83.74859	-59.2	7.9	-82.8	31.1	0.58758	0.862	-89.6	67.8	40.1	30.4	26.9	1.84720	2-3
4	-10.751	-20.306	84.98937	-60.6	8.3	-82.7	30.9	0.59667	0.849	-89.6	67.9	38.5	31.9	28.6	2.67452	3-4
5	-10.829	-20.293	85.72087	-58.4	8.4	-83.5	31.2	0.60181	0.841	-91.5	67.9	38.5	32.7	28.3	2.39164	4-5
6	-10.829	-20.384	84.45821	-56.9	8.0	-83.6	31.4	0.59293	0.855	-91.4	67.8	40.1	31.3	26.6	2.70257	5-6
7	-10.752	-20.396	83.74859	-59.2	7.9	-82.8	31.1	0.58758	0.862	-89.6	67.8	40.1	30.4	26.9	2.35330	6-7

JULY 31, 1964 13 HR 25 MIN 18 SEC 574 MS TAB NO 154 ATLAS PHOTO NO 154 POD SEQUENCE NO 943

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		30.225	70.74466	-10.171	-21.596	1806.200	2.572	-64.812	114.934							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.784	-20.352	82.42007	-58.8	8.1	-83.1	31.2	0.57876	0.852	-90.5	67.8	39.3	31.6	27.6	0.	1-2
3	-10.749	-20.401	81.50678	-59.2	7.9	-82.8	31.1	0.57224	0.862	-89.6	67.8	40.1	30.4	26.9	1.79770	2-3
4	-10.747	-20.313	82.71404	-60.6	8.3	-82.7	30.9	0.58070	0.849	-89.6	67.9	38.5	31.9	28.6	2.60278	3-4
5	-10.823	-20.301	83.42577	-58.4	8.4	-83.5	31.2	0.58570	0.841	-91.5	67.9	38.5	32.7	28.3	2.32760	4-5
6	-10.824	-20.389	82.19724	-56.9	8.0	-83.6	31.4	0.57766	0.855	-91.4	67.8	40.1	31.3	26.6	2.63005	5-6
7	-10.749	-20.401	81.50678	-59.2	7.9	-82.8	31.1	0.57224	0.862	-89.6	67.8	40.1	30.4	26.9	2.29021	6-7

JULY 31, 1964 13 HR 25 MIN 19 SEC 414 MS TAB NO 155 ATLAS PHOTO NO 155 POD SEQUENCE NO 944

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		29.385	68.78920	-10.183	-21.569	1804.244	2.574	-64.794	114.929							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.780	-20.358	80.15185	-58.8	8.1	-83.1	31.2	0.56283	0.852	-90.4	67.8	39.3	31.6	27.6	0.	1-2
3	-10.746	-20.406	79.26391	-59.2	7.9	-82.7	31.1	0.55649	0.862	-89.6	67.8	40.1	30.4	26.9	1.74810	2-3
4	-10.744	-20.320	80.43764	-60.6	8.3	-82.7	30.9	0.56472	0.849	-89.6	67.9	38.5	31.9	28.6	2.53100	3-4
5	-10.818	-20.308	81.12958	-58.4	8.4	-83.5	31.2	0.56958	0.841	-91.5	67.9	38.5	32.7	28.3	2.26356	4-5
6	-10.819	-20.394	79.93522	-56.9	8.0	-83.6	31.4	0.56118	0.855	-91.4	67.8	40.1	31.3	26.6	2.55752	5-6
7	-10.746	-20.406	79.26391	-59.2	7.9	-82.7	31.1	0.55649	0.862	-89.6	67.8	40.1	30.4	26.9	2.22721	6-7

JULY 31, 1964 13 HR 25 MIN 20 SEC 254 MS TAB NO 156 ATLAS PHOTO NO 156 POD SEQUENCE NO 945

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		28.545	66.83289	-10.196	-21.542	1802.288	2.575	-64.777	114.924							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.776	-20.364	77.88206	-58.8	8.1	-83.1	31.2	0.54689	0.852	-90.4	67.8	39.3	31.5	27.6	0.	1-2
3	-10.743	-20.410	77.01946	-59.2	7.9	-82.7	31.1	0.54073	0.862	-89.6	67.8	40.1	30.4	26.9	1.69851	2-3
4	-10.741	-20.328	78.15967	-60.6	8.3	-82.7	30.9	0.54873	0.849	-89.6	67.9	38.5	31.9	28.6	2.45920	3-4
5	-10.813	-20.316	78.83185	-58.4	8.4	-83.5	31.2	0.55345	0.842	-91.5	67.9	38.5	32.7	28.3	2.19942	4-5
6	-10.814	-20.400	77.67161	-56.9	8.0	-83.6	31.4	0.54529	0.855	-91.4	67.8	40.1	31.3	26.6	2.48494	5-6
7	-10.743	-20.410	77.01946	-59.2	7.9	-82.7	31.1	0.54073	0.862	-89.6	67.8	40.1	30.4	26.9	2.16413	6-7

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JULY 31, 1964 13 HR 25 MIN 21 SEC 94 MS TAB NO 157 ATLAS PHOTO NO 157 POD SEQUENCE NO 946

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
				27.705			64.87643		-10.208		-21.515		1800.332		2.576		-64.759		114.919	
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.772	-20.370	75.61156	-58.8	8.1	-83.1	31.2	0.53055	0.852	-90.4	67.8	39.3	31.5	27.6	0.	1-2				
3	-10.740	-20.415	74.77430	-59.2	7.9	-82.7	31.1	0.52497	0.862	-89.6	67.8	40.1	30.4	26.9	1.64891	2-3				
4	-10.738	-20.335	75.88099	-60.6	8.3	-82.7	30.9	0.53273	0.849	-89.6	67.9	38.5	31.9	28.6	2.38738	3-4				
5	-10.808	-20.324	76.53337	-58.4	8.4	-83.5	31.2	0.53731	0.842	-91.5	67.9	38.5	32.7	28.3	2.13518	4-5				
6	-10.808	-20.405	75.40726	-56.9	8.0	-83.6	31.4	0.52939	0.855	-91.4	67.8	40.1	31.3	26.6	2.41236	5-6				
7	-10.740	-20.415	74.77430	-59.2	7.9	-82.7	31.1	0.52497	0.862	-89.6	67.8	40.1	30.4	26.9	2.10093	6-7				

JULY 31, 1964 13 HR 25 MIN 21 SEC 934 MS TAB NO 158 ATLAS PHOTO NO 158 POD SEQUENCE NO 947

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
				26.865			62.91702		-10.220		-21.488		1798.374		2.577		-64.742		114.913	
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.767	-20.377	73.33940	-58.8	8.1	-83.1	31.2	0.51499	0.852	-90.4	67.8	39.3	31.5	27.6	0.	1-2				
3	-10.737	-20.420	72.52750	-59.2	7.9	-82.7	31.1	0.50920	0.863	-89.6	67.8	40.1	30.4	26.9	1.59922	2-3				
4	-10.735	-20.342	73.00062	-60.6	8.3	-82.7	30.9	0.51672	0.849	-89.6	67.8	38.5	31.9	28.6	2.31549	3-4				
5	-10.803	-20.331	74.23324	-58.4	8.4	-83.5	31.2	0.52116	0.842	-91.5	67.9	38.5	32.7	28.3	2.07094	4-5				
6	-10.803	-20.410	73.14129	-56.9	8.0	-83.6	31.4	0.51348	0.855	-91.4	67.8	40.1	31.3	26.6	2.33970	5-6				
7	-10.737	-20.420	72.52750	-59.2	7.9	-82.7	31.1	0.50920	0.863	-89.6	67.8	40.1	30.4	26.9	2.03774	6-7				

JULY 31, 1964 13 HR 25 MIN 22 SEC 774 MS TAB NO 159 ATLAS PHOTO NO 159 POD SEQUENCE NO 948

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
				26.025			60.96124		-10.233		-21.461		1796.417		2.578		-64.724		114.908	
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.763	-20.383	71.06626	-58.8	8.1	-83.1	31.2	0.49903	0.852	-90.4	67.8	39.3	31.5	27.6	0.	1-2				
3	-10.733	-20.425	70.27970	-59.2	7.9	-82.7	31.1	0.49342	0.863	-89.6	67.8	40.1	30.4	26.9	1.54959	2-3				
4	-10.732	-20.350	71.31931	-60.6	8.3	-82.7	30.9	0.50070	0.849	-89.6	67.8	38.5	31.9	28.5	2.24361	3-4				
5	-10.797	-20.339	71.93214	-58.4	8.4	-83.5	31.2	0.50501	0.842	-91.5	67.9	38.5	32.7	28.3	2.00670	4-5				
6	-10.798	-20.415	70.87431	-56.9	8.0	-83.6	31.4	0.49757	0.855	-91.4	67.8	40.1	31.3	26.6	2.26706	5-6				
7	-10.733	-20.425	70.27970	-59.2	7.9	-82.7	31.1	0.49342	0.863	-89.6	67.8	40.1	30.4	26.9	1.97454	6-7				

JULY 31, 1964 13 HR 25 MIN 23 SEC 614 MS TAB NO 160 ATLAS PHOTO NO 160 POD SEQUENCE NO 949

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
				25.185			59.00261		-10.245		-21.434		1794.458		2.579		-64.707		114.903	
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.759	-20.389	68.79154	-58.8	8.1	-83.1	31.2	0.48306	0.852	-90.4	67.8	39.3	31.5	27.6	0.	1-2				
3	-10.730	-20.430	68.03035	-59.2	7.9	-82.7	31.1	0.47762	0.863	-89.6	67.8	40.1	30.4	26.9	1.49986	2-3				
4	-10.729	-20.357	69.03641	-60.6	8.3	-82.7	30.9	0.48468	0.849	-89.6	67.8	38.5	31.9	28.5	2.17166	3-4				
5	-10.792	-20.347	69.62946	-58.4	8.4	-83.5	31.2	0.48884	0.842	-91.5	67.8	38.5	32.7	28.3	1.94246	4-5				
6	-10.793	-20.421	68.80579	-56.9	8.0	-83.6	31.4	0.48164	0.855	-91.4	67.8	40.1	31.3	26.6	2.19435	5-6				
7	-10.730	-20.430	68.03035	-59.2	7.9	-82.7	31.1	0.47762	0.863	-89.6	67.8	40.1	30.4	26.9	1.91125	6-7				

JULY 31, 1964 13 HR 25 MIN 24 SEC 454 MS TAB NO 161 ATLAS PHOTO NO 161 POD SEQUENCE NO 950

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
				24.346			57.04366		-10.258		-21.406		1792.499		2.580		-64.689		114.898	
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.755	-20.396	66.51592	-58.8	8.1	-83.1	31.2	0.46708	0.853	-90.4	67.8	39.3	31.5	27.6	0.	1-2				
3	-10.727	-20.435	65.78008	-59.2	7.9	-82.7	31.1	0.46183	0.863	-89.6	67.8	40.1	30.4	26.9	1.45014	2-3				
4	-10.726	-20.365	66.75260	-60.6	8.3	-82.6	30.9	0.46864	0.850	-89.6	67.8	38.5	31.9	28.5	2.09971	3-4				
5	-10.787	-20.355	67.32588	-58.4	8.4	-83.5	31.2	0.47267	0.842	-91.5	67.8	38.5	32.7	28.3	1.87812	4-5				
6	-10.787	-20.426	66.33635	-56.9	8.0	-83.6	31.4	0.46571	0.855	-91.4	67.8	40.1	31.2	26.6	2.12163	5-6				
7	-10.727	-20.435	65.78008	-59.2	7.9	-82.7	31.1	0.46183	0.863	-89.6	67.8	40.1	30.4	26.9	1.84804	6-7				

JULY 31, 1964 13 HR 25 MIN 25 SEC 294 MS TAB NO 162 ATLAS PHOTO NO 162 POD SEQUENCE NO 951

TRAJECTORY DATA				SEC TO IMPACT			ALT		LAT		LCN		R		V		PTH		AZ	
				23.506			55.08392		-10.270		-21.379		1790.539		2.582		-64.671		114.893	
PHOTO DATA																				
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT				
2	-10.751	-20.402	64.23882	-58.8	8.1	-83.1	31.2	0.45109	0.853	-90.4	67.8	39.3	31.5	27.6	0.	1-2				
3	-10.724	-20.440	63.52832	-59.2	7.9	-82.7	31.1	0.44602	0.863	-89.6	67.7	40.1	30.4	26.8	1.40046	2-3				
4	-10.723	-20.372	64.46732	-60.6	8.3	-82.6	30.9	0.45260	0.850	-89.6	67.8	38.5	31.8	28.5	2.02772	3-4				
5	-10.782	-20.362	65.02081	-58.4	8.4	-83.5	31.2	0.45649	0.842	-91.5	67.8	38.5	32.7	28.2	1.81377	4-5				
6	-10.782	-20.431	64.06542	-56.9	8.0	-83.6	31.4	0.44977	0.855	-91.4	67.8	40.1	31.2	26.6	2.04886	5-6				
7	-10.724	-20.440	63.52832	-59.2	7.9	-82.7	31.1	0.44602	0.863	-89.6	67.7	40.1	30.4	26.8	1.78475	6-7				

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JULY 31, 1964 13 HR 25 MIN 26 SEC 134 MS TAB NO 163 ATLAS PHOTO NO 163 POD SEQUENCE NO 952

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		22.666	53.12376	-10.283	-21.352	1788.579	2.583	-64.654	114.888							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.747	-20.408	61.96065	-58.8	8.1	-83.1	31.2	0.43509	0.853	-90.4	67.8	39.3	31.5	27.6	0.	1-2
3	-10.721	-20.445	61.27553	-59.2	7.9	-82.7	31.1	0.43020	0.863	-89.6	67.7	40.1	30.4	26.8	1.35065	2-3
4	-10.719	-20.379	62.18096	-60.6	8.3	-82.6	30.9	0.43655	0.850	-89.6	67.8	38.5	31.8	28.5	1.95569	3-4
5	-10.776	-20.370	62.71468	-58.4	8.4	-83.5	31.2	0.44030	0.842	-91.5	67.8	38.5	32.6	28.2	1.74943	4-5
6	-10.777	-20.437	61.79344	-57.0	8.0	-83.6	31.4	0.43382	0.855	-91.4	67.8	40.1	31.2	26.6	1.97603	5-6
7	-10.721	-20.445	61.27553	-59.2	7.9	-82.7	31.1	0.43020	0.863	-89.6	67.7	40.1	30.4	26.8	1.72135	6-7

JULY 31, 1964 13 HR 25 MIN 26 SEC 974 MS TAB NO 164 ATLAS PHOTO NO 164 POD SEQUENCE NO 953

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		21.826	51.16293	-10.295	-21.324	1786.618	2.584	-64.636	114.883							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.743	-20.415	59.68117	-58.8	8.1	-83.1	31.2	0.41908	0.853	-90.4	67.8	39.3	31.5	27.6	0.	1-2
3	-10.717	-20.450	59.02141	-59.2	7.9	-82.7	31.1	0.41437	0.863	-89.6	67.7	40.1	30.4	26.8	1.30093	2-3
4	-10.716	-20.387	59.63330	-60.6	8.3	-82.6	30.9	0.42049	0.850	-89.6	67.8	38.5	31.8	28.5	1.88366	3-4
5	-10.771	-20.378	60.40723	-58.4	8.4	-83.5	31.2	0.42410	0.842	-91.5	67.8	38.5	32.6	28.2	1.68499	4-5
6	-10.772	-20.442	59.52013	-57.0	8.0	-83.6	31.4	0.41786	0.855	-91.4	67.8	40.1	31.2	26.6	1.90327	5-6
7	-10.717	-20.450	59.02141	-59.2	7.9	-82.7	31.1	0.41437	0.863	-89.6	67.7	40.1	30.4	26.8	1.65805	6-7

JULY 31, 1964 13 HR 25 MIN 27 SEC 814 MS TAB NO 165 ATLAS PHOTO NO 165 POD SEQUENCE NO 954

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		20.986	49.20149	-10.308	-21.297	1784.657	2.585	-64.618	114.877							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.738	-20.421	57.40040	-58.8	8.1	-83.1	31.2	0.40307	0.853	-90.4	67.8	39.3	31.5	27.5	0.	1-2
3	-10.714	-20.455	56.76598	-59.2	7.9	-82.7	31.1	0.39854	0.863	-89.6	67.7	40.1	30.4	26.8	1.25116	2-3
4	-10.713	-20.394	57.60434	-60.6	8.3	-82.6	30.9	0.40442	0.850	-89.6	67.8	38.5	31.8	28.5	1.81156	3-4
5	-10.766	-20.386	58.09849	-58.4	8.4	-83.5	31.2	0.40769	0.842	-91.5	67.8	38.5	32.6	28.2	1.62054	4-5
6	-10.766	-20.447	57.24553	-57.0	8.0	-83.6	31.4	0.40189	0.855	-91.4	67.7	40.1	31.2	26.6	1.83042	5-6
7	-10.714	-20.455	56.76598	-59.2	7.9	-82.7	31.1	0.39854	0.863	-89.6	67.7	40.1	30.4	26.8	1.59465	6-7

JULY 31, 1964 13 HR 25 MIN 28 SEC 654 MS TAB NO 166 ATLAS PHOTO NO 166 POD SEQUENCE NO 955

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		20.146	47.23932	-10.320	-21.269	1782.695	2.586	-64.600	114.872							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.734	-20.428	55.11819	-58.8	8.1	-83.1	31.2	0.38704	0.853	-90.4	67.8	39.3	31.5	27.5	0.	1-2
3	-10.711	-20.460	54.50916	-59.2	7.9	-82.7	31.1	0.38270	0.863	-89.6	67.7	40.1	30.4	26.8	1.20136	2-3
4	-10.710	-20.402	55.31397	-60.6	8.3	-82.6	30.9	0.38834	0.850	-89.6	67.8	38.5	31.8	28.5	1.73942	3-4
5	-10.761	-20.394	55.78834	-58.4	8.4	-83.5	31.2	0.39167	0.842	-91.5	67.8	38.5	32.6	28.2	1.55610	4-5
6	-10.761	-20.453	54.96953	-57.0	8.0	-83.6	31.4	0.38591	0.855	-91.4	67.7	40.1	31.2	26.6	1.75752	5-6
7	-10.711	-20.460	54.50916	-59.2	7.9	-82.7	31.1	0.38270	0.863	-89.6	67.7	40.1	30.4	26.8	1.53125	6-7

JULY 31, 1964 13 HR 25 MIN 29 SEC 494 MS TAB NO 167 ATLAS PHOTO NO 167 POD SEQUENCE NO 956

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		19.306	45.27672	-10.333	-21.241	1780.732	2.587	-64.582	114.867							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.730	-20.434	52.83501	-58.8	8.1	-83.1	31.2	0.37101	0.853	-90.4	67.8	39.3	31.5	27.5	0.	1-2
3	-10.708	-20.465	52.25134	-59.2	7.9	-82.7	31.1	0.36684	0.863	-89.6	67.7	40.1	30.4	26.8	1.15149	2-3
4	-10.707	-20.409	53.02259	-60.6	8.3	-82.6	31.0	0.37225	0.850	-89.6	67.8	38.5	31.8	28.5	1.66726	3-4
5	-10.755	-20.402	53.47721	-58.4	8.4	-83.5	31.2	0.37544	0.842	-91.5	67.8	38.5	32.6	28.2	1.49155	4-5
6	-10.756	-20.458	52.69256	-57.0	8.0	-83.6	31.4	0.36992	0.855	-91.4	67.7	40.1	31.2	26.5	1.68461	5-6
7	-10.708	-20.465	52.25134	-59.2	7.9	-82.7	31.1	0.36684	0.863	-89.6	67.7	40.1	30.4	26.8	1.46775	6-7

JULY 31, 1964 13 HR 25 MIN 30 SEC 334 MS TAB NO 168 ATLAS PHOTO NO 168 POD SEQUENCE NO 957

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		18.466	43.31345	-10.346	-21.214	1778.769	2.589	-64.564	114.862							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.726	-20.441	50.55049	-58.8	8.1	-83.1	31.2	0.35497	0.853	-90.4	67.7	39.3	31.5	27.5	0.	1-2
3	-10.705	-20.471	49.99218	-59.2	7.9	-82.7	31.1	0.35098	0.863	-89.6	67.7	40.1	30.4	26.8	1.10168	2-3
4	-10.703	-20.417	50.72989	-60.6	8.3	-82.6	31.0	0.35615	0.850	-89.6	67.8	38.5	31.8	28.5	1.59508	3-4
5	-10.750	-20.409	51.16476	-58.4	8.4	-83.5	31.2	0.35921	0.842	-91.5	67.8	38.5	32.6	28.2	1.42711	4-5
6	-10.750	-20.464	50.41424	-57.0	8.0	-83.6	31.4	0.35393	0.856	-91.4	67.7	40.1	31.2	26.5	1.61166	5-6
7	-10.705	-20.471	49.99218	-59.2	7.9	-82.7	31.1	0.35098	0.863	-89.6	67.7	40.1	30.4	26.8	1.40425	6-7

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JULY 31, 1964 13 HR 25 MIN 31 SEC 174 MS TAB NO 169 ATLAS PHOTO NO 169 POD SEQUENCE NO 958

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		17.626		41.34969		-10.358		-21.186		1776.805		2.590		-64.546		114.857	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.722	-20.447	48.26482	-58.8	8.1	-83.1	31.2	0.33892	0.853	-90.4	67.7	39.3	31.5	27.5	0.	1-2	
3	-10.701	-20.476	47.73188	-59.2	7.9	-82.7	31.1	0.33511	0.863	-89.6	67.7	40.1	30.4	26.8	1.05178	2-3	
4	-10.700	-20.425	48.43603	-60.6	8.3	-82.6	31.0	0.34005	0.850	-89.6	67.8	38.5	31.8	28.5	1.52286	3-4	
5	-10.745	-20.417	48.85112	-58.4	8.4	-83.5	31.2	0.34297	0.843	-91.5	67.8	38.5	32.6	28.2	1.36247	4-5	
6	-10.745	-20.469	48.13477	-57.0	8.0	-83.6	31.4	0.33753	0.856	-91.4	67.7	40.1	31.2	26.5	1.53869	5-6	
7	-10.701	-20.476	47.73188	-59.2	7.9	-82.7	31.1	0.33511	0.863	-89.6	67.7	40.1	30.4	26.8	1.34074	6-7	

JULY 31, 1964 13 HR 25 MIN 32 SEC 13 MS TAB NO 170 ATLAS PHOTO NO 170 POD SEQUENCE NO 959

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		16.786		39.38525		-10.371		-21.158		1774.841		2.591		-64.528		114.851	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.717	-20.454	45.97778	-58.8	8.1	-83.1	31.2	0.32286	0.853	-90.4	67.7	39.3	31.5	27.5	0.	1-2	
3	-10.698	-20.481	45.47022	-59.2	7.9	-82.7	31.1	0.31924	0.863	-89.6	67.7	40.1	30.4	26.8	1.00188	2-3	
4	-10.697	-20.432	46.14040	-60.6	8.3	-82.6	31.0	0.32354	0.850	-89.6	67.8	38.5	31.8	28.5	1.45064	3-4	
5	-10.739	-20.425	46.53615	-58.4	8.4	-83.5	31.2	0.32671	0.843	-91.5	67.8	38.5	32.6	28.2	1.29792	4-5	
6	-10.740	-20.474	45.85395	-57.0	8.0	-83.6	31.4	0.32141	0.856	-91.4	67.7	40.1	31.2	26.5	1.46568	5-6	
7	-10.698	-20.481	45.47022	-59.2	7.9	-82.7	31.1	0.31924	0.863	-89.6	67.7	40.1	30.4	26.8	1.27724	6-7	

JULY 31, 1964 13 HR 25 MIN 32 SEC 853 MS TAB NO 171 ATLAS PHOTO NO 171 POD SEQUENCE NO 960

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		15.946		37.42023		-10.384		-21.130		1772.876		2.592		-64.510		114.846	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.713	-20.460	43.68947	-58.8	8.1	-83.1	31.2	0.30679	0.853	-90.4	67.7	39.3	31.4	27.5	0.	1-2	
3	-10.695	-20.486	43.20729	-59.2	7.9	-82.7	31.1	0.30335	0.863	-89.6	67.7	40.1	30.4	26.8	0.95190	2-3	
4	-10.694	-20.440	43.84430	-60.6	8.3	-82.6	31.0	0.30781	0.850	-89.6	67.7	38.5	31.8	28.5	1.37833	3-4	
5	-10.734	-20.433	44.21988	-58.4	8.4	-83.5	31.2	0.31045	0.843	-91.5	67.8	38.5	32.6	28.2	1.23327	4-5	
6	-10.734	-20.480	43.57184	-57.0	8.0	-83.6	31.4	0.30589	0.856	-91.4	67.7	40.1	31.2	26.5	1.39264	5-6	
7	-10.695	-20.486	43.20729	-59.2	7.9	-82.7	31.1	0.30335	0.863	-89.6	67.7	40.1	30.4	26.8	1.21353	6-7	

JULY 31, 1964 13 HR 25 MIN 33 SEC 693 MS TAB NO 172 ATLAS PHOTO NO 172 POD SEQUENCE NO 961

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		15.106		35.45445		-10.396		-21.102		1770.910		2.593		-64.492		114.841	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.709	-20.467	41.39968	-58.8	8.1	-83.1	31.2	0.29071	0.853	-90.4	67.7	39.3	31.4	27.5	0.	1-2	
3	-10.691	-20.491	40.94286	-59.2	7.9	-82.7	31.1	0.28745	0.863	-89.6	67.7	40.1	30.3	26.8	0.90196	2-3	
4	-10.691	-20.447	41.54633	-60.6	8.3	-82.6	31.0	0.29168	0.850	-89.6	67.7	38.5	31.8	28.4	1.30603	3-4	
5	-10.729	-20.441	41.90216	-58.4	8.4	-83.5	31.2	0.29418	0.843	-91.5	67.7	38.5	32.6	28.2	1.16863	4-5	
6	-10.729	-20.486	41.28824	-57.0	8.0	-83.6	31.4	0.28986	0.856	-91.4	67.7	40.1	31.2	26.5	1.31958	5-6	
7	-10.691	-20.491	40.94286	-59.2	7.9	-82.7	31.1	0.28745	0.863	-89.6	67.7	40.1	30.3	26.8	1.14993	6-7	

JULY 31, 1964 13 HR 25 MIN 34 SEC 533 MS TAB NO 173 ATLAS PHOTO NO 173 POD SEQUENCE NO 962

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		14.266		33.48819		-10.409		-21.074		1768.943		2.595		-64.474		114.835	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.705	-20.473	39.10877	-58.8	8.1	-83.1	31.2	0.27462	0.853	-90.4	67.7	39.3	31.4	27.5	0.	1-2	
3	-10.688	-20.496	38.67733	-59.2	7.9	-82.7	31.1	0.27154	0.863	-89.6	67.7	40.1	30.3	26.8	0.85201	2-3	
4	-10.687	-20.455	39.24722	-60.6	8.3	-82.6	31.0	0.27554	0.850	-89.5	67.7	38.5	31.8	28.4	1.23367	3-4	
5	-10.723	-20.449	39.56328	-58.4	8.4	-83.5	31.2	0.27790	0.843	-91.5	67.7	38.5	32.6	26.2	1.10398	4-5	
6	-10.724	-20.491	39.00354	-57.0	8.0	-83.6	31.4	0.27382	0.856	-91.4	67.7	40.1	31.2	26.5	1.24645	5-6	
7	-10.688	-20.496	38.67733	-59.2	7.9	-82.7	31.1	0.27154	0.863	-89.6	67.7	40.1	30.3	26.8	1.08633	6-7	

JULY 31, 1964 13 HR 25 MIN 35 SEC 373 MS TAB NO 174 ATLAS PHOTO NO 174 POD SEQUENCE NO 963

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
		13.426		31.52150		-10.422		-21.046		1766.977		2.596		-64.456		114.830	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.700	-20.480	36.81677	-58.8	8.1	-83.1	31.2	0.25853	0.853	-90.4	67.7	39.3	31.4	27.5	0.	1-2	
3	-10.685	-20.502	36.41071	-59.2	7.9	-82.7	31.1	0.25563	0.863	-89.6	67.7	40.1	30.3	26.8	0.80205	2-3	
4	-10.684	-20.463	36.94705	-60.6	8.3	-82.6	31.0	0.25939	0.850	-89.5	67.7	38.5	31.8	28.4	1.16131	3-4	
5	-10.718	-20.457	37.26334	-58.4	8.3	-83.5	31.2	0.26161	0.843	-91.5	67.7	38.5	32.6	28.1	1.03923	4-5	
6	-10.718	-20.497	36.71773	-57.0	8.0	-83.6	31.4	0.25777	0.856	-91.4	67.7	40.1	31.2	26.5	1.17334	5-6	
7	-10.685	-20.502	36.41071	-59.2	7.9	-82.7	31.1	0.25563	0.863	-89.6	67.7	40.1	30.3	26.8	1.02262	6-7	

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JULY 31, 1964 13 HR 25 MIN 36 SEC 213 MS TAB NO 175 ATLAS PHOTO NO 175 POD SEQUENCE NO 964

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				12.586	29.55389	-10.435	-21.018	1765.009	2.597	-64.438	114.825		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.696	-20.486	34.52310	-58.8	8.1	-83.1	31.2	0.24242	0.853	-90.4	67.7 39.3 31.4	27.5	0.
3	-10.682	-20.507	34.14241	-59.2	7.9	-82.7	31.1	0.23971	0.863	-89.6	67.7 40.1 30.3	26.8	0.75207
4	-10.681	-20.470	34.64521	-60.5	8.3	-82.6	31.0	0.24323	0.850	-89.5	67.7 38.5 31.8	28.4	1.08888
5	-10.713	-20.465	34.94173	-58.4	8.3	-83.5	31.2	0.24531	0.843	-91.5	67.7 38.5 32.5	28.1	0.97439
6	-10.713	-20.502	34.43027	-57.0	8.0	-83.6	31.4	0.24172	0.854	-91.4	67.7 40.1 31.1	26.5	1.10017
7	-10.682	-20.507	34.14241	-59.2	7.9	-82.7	31.1	0.23971	0.863	-89.6	67.7 40.1 30.3	26.8	0.95901

JULY 31, 1964 13 HR 25 MIN 37 SEC 53 MS TAB NO 176 ATLAS PHOTO NO 176 POD SEQUENCE NO 965

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				11.746	27.58588	-10.448	-20.990	1763.041	2.598	-64.420	114.819		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.692	-20.493	32.22837	-58.8	8.1	-83.1	31.2	0.22631	0.853	-90.4	67.7 39.3 31.4	27.5	0.
3	-10.678	-20.512	31.87308	-59.2	7.9	-82.7	31.1	0.22377	0.863	-89.6	67.7 40.1 30.3	26.8	0.70201
4	-10.677	-20.478	32.34232	-60.5	8.3	-82.6	31.0	0.22706	0.851	-89.5	67.7 38.5 31.7	28.4	1.01643
5	-10.707	-20.473	32.61905	-58.4	8.3	-83.5	31.2	0.22901	0.843	-91.5	67.7 38.5 32.5	28.1	0.90954
6	-10.707	-20.508	32.14175	-57.0	8.0	-83.6	31.4	0.22565	0.856	-91.4	67.7 40.1 31.1	26.5	1.02697
7	-10.678	-20.512	31.87308	-59.2	7.9	-82.7	31.1	0.22377	0.863	-89.6	67.7 40.1 30.3	26.8	0.89520

JULY 31, 1964 13 HR 25 MIN 37 SEC 893 MS TAB NO 177 ATLAS PHOTO NO 177 POD SEQUENCE NO 966

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				10.906	25.61717	-10.461	-20.961	1761.072	2.599	-64.401	114.814		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.687	-20.500	29.93224	-58.8	8.1	-83.1	31.2	0.21018	0.854	-90.4	67.7 39.3 31.4	27.5	0.
3	-10.675	-20.518	29.60234	-59.2	7.9	-82.7	31.1	0.20783	0.863	-89.6	67.7 40.1 30.3	26.8	0.65202
4	-10.674	-20.486	30.03862	-60.5	8.3	-82.6	31.0	0.21088	0.851	-89.5	67.7 38.5 31.7	28.4	0.94398
5	-10.702	-20.481	30.29500	-58.4	8.3	-83.5	31.2	0.21269	0.843	-91.5	67.7 38.5 32.5	28.1	0.84488
6	-10.702	-20.513	29.85182	-57.0	8.0	-83.6	31.4	0.20957	0.856	-91.4	67.7 40.1 31.1	26.5	0.95373
7	-10.675	-20.518	29.60234	-59.2	7.9	-82.7	31.1	0.20783	0.863	-89.6	67.7 40.1 30.3	26.8	0.83139

JULY 31, 1964 13 HR 25 MIN 38 SEC 733 MS TAB NO 178 ATLAS PHOTO NO 178 POD SEQUENCE NO 967

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				10.066	23.64793	-10.473	-20.933	1759.103	2.600	-64.383	114.808		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.683	-20.506	27.63490	-58.8	8.1	-83.1	31.2	0.19405	0.854	-90.4	67.7 39.3 31.4	27.5	0.
3	-10.671	-20.523	27.33040	-59.2	7.9	-82.7	31.1	0.19188	0.863	-89.6	67.7 40.1 30.3	26.8	0.60193
4	-10.671	-20.494	27.73250	-60.5	8.3	-82.6	31.0	0.19470	0.851	-89.5	67.7 38.5 31.7	28.4	0.87147
5	-10.696	-20.489	27.96971	-58.4	8.3	-83.5	31.2	0.19636	0.843	-91.5	67.7 38.5 32.5	28.1	0.78003
6	-10.696	-20.519	27.56067	-57.0	8.0	-83.6	31.4	0.19349	0.856	-91.4	67.7 40.1 31.1	26.5	0.88048
7	-10.671	-20.523	27.33040	-59.2	7.9	-82.7	31.1	0.19188	0.863	-89.6	67.7 40.1 30.3	26.8	0.76758

JULY 31, 1964 13 HR 25 MIN 39 SEC 573 MS TAB NO 179 ATLAS PHOTO NO 179 POD SEQUENCE NO 968

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				9.226	21.67807	-10.486	-20.905	1757.133	2.602	-64.365	114.803		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.679	-20.513	25.33621	-58.8	8.1	-83.1	31.2	0.17791	0.854	-90.4	67.7 39.3 31.4	27.5	0.
3	-10.668	-20.528	25.05710	-59.2	7.9	-82.7	31.2	0.17592	0.863	-89.6	67.7 40.1 30.3	26.8	0.55177
4	-10.668	-20.501	25.42566	-60.5	8.3	-82.6	31.0	0.17850	0.851	-89.5	67.7 38.5 31.7	28.4	0.79892
5	-10.691	-20.498	25.64307	-58.4	8.3	-83.5	31.2	0.18003	0.843	-91.5	67.7 38.5 32.5	28.1	0.71508
6	-10.691	-20.525	25.26819	-57.0	8.0	-83.6	31.4	0.17739	0.856	-91.4	67.7 40.1 31.1	26.5	0.80717
7	-10.668	-20.528	25.05710	-59.2	7.9	-82.7	31.2	0.17592	0.863	-89.6	67.7 40.1 30.3	26.8	0.70366

JULY 31, 1964 13 HR 25 MIN 40 SEC 413 MS TAB NO 180 ATLAS PHOTO NO 180 POD SEQUENCE NO 969

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				8.386	19.70760	-10.499	-20.876	1755.163	2.603	-64.346	114.798		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.674	-20.520	23.03624	-58.8	8.1	-83.1	31.2	0.16176	0.854	-90.4	67.7 39.3 31.4	27.4	0.
3	-10.665	-20.534	22.78254	-59.2	7.9	-82.7	31.2	0.15995	0.864	-89.6	67.7 40.1 30.3	26.7	0.50160
4	-10.664	-20.509	23.11753	-60.5	8.3	-82.6	31.0	0.16230	0.851	-89.5	67.7 38.5 31.7	28.4	0.72634
5	-10.685	-20.506	23.31516	-58.4	8.3	-83.5	31.2	0.16369	0.844	-91.5	67.7 38.5 32.5	28.1	0.65013
6	-10.686	-20.530	22.97443	-57.0	8.0	-83.6	31.4	0.16129	0.856	-91.4	67.7 40.1 31.1	26.5	0.73384
7	-10.665	-20.534	22.78254	-59.2	7.9	-82.7	31.2	0.15995	0.864	-89.6	67.7 40.1 30.3	26.7	0.63975

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JULY 31, 1964 13 HR 25 MIN 41 SEC 253 MS

TAB NO 181

ATLAS PHOTO NO 181

POD SEQUENCE NO 970

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				7.547		17.73640	-10.512	-20.848	1753.192	2.604	-64.328	114.792				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.670	-20.527	20.73480	-58.8	8.1	-83.1	31.2	C.14560	0.854	-90.4	67.7	39.3	31.4	27.4	0.	1-2
3	-10.661	-20.539	20.50651	-59.2	7.9	-82.7	31.2	C.14397	0.864	-89.6	67.6	40.1	30.3	26.7	0.45149	2-3
4	-10.661	-20.517	20.60796	-60.5	8.3	-82.6	31.0	C.14608	0.851	-89.5	67.7	38.5	31.7	28.4	0.65376	3-4
5	-10.680	-20.514	20.98580	-58.4	8.3	-83.5	31.2	C.14733	0.844	-91.4	67.7	38.5	32.5	28.1	0.58517	4-5
6	-10.680	-20.536	20.67918	-57.0	7.9	-83.6	31.4	C.14518	0.856	-91.4	67.7	40.1	31.1	26.5	0.66049	5-6
7	-10.661	-20.539	20.50651	-59.2	7.9	-82.7	31.2	C.14397	0.864	-89.6	67.6	40.1	30.3	26.7	0.57584	6-7

JULY 31, 1964 13 HR 25 MIN 42 SEC 93 MS

TAB NO 182

ATLAS PHOTO NO 182

POD SEQUENCE NO 971

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				6.707		15.76483	-10.525	-20.819	1751.220	2.605	-64.310	114.787				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.666	-20.533	18.43235	-58.8	8.1	-83.1	31.2	C.12943	0.854	-90.4	67.7	39.3	31.4	27.4	0.	1-2
3	-10.658	-20.544	18.22945	-59.2	7.9	-82.7	31.2	C.12758	0.864	-89.6	67.6	40.1	30.3	26.7	0.40140	2-3
4	-10.657	-20.525	18.49734	-60.5	8.3	-82.6	31.0	C.12986	0.851	-89.5	67.7	38.5	31.7	28.4	0.58112	3-4
5	-10.674	-20.522	18.65541	-58.4	8.3	-83.5	31.2	C.13097	0.844	-91.4	67.7	38.5	32.5	28.1	0.52022	4-5
6	-10.675	-20.542	18.36293	-57.0	7.9	-83.6	31.4	C.12906	0.856	-91.4	67.6	40.1	31.1	26.5	0.58711	5-6
7	-10.658	-20.544	18.22945	-59.2	7.9	-82.7	31.2	C.12758	0.864	-89.6	67.6	40.1	30.3	26.7	0.51202	6-7

JULY 31, 1964 13 HR 25 MIN 42 SEC 933 MS

TAB NO 183

ATLAS PHOTO NO 183

POD SEQUENCE NO 972

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				5.867		13.79242	-10.538	-20.790	1749.248	2.607	-64.291	114.781				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.661	-20.540	16.12832	-58.8	8.1	-83.1	31.2	C.11325	0.854	-90.4	67.6	39.3	31.4	27.4	0.	1-2
3	-10.654	-20.550	15.95080	-59.2	7.9	-82.7	31.2	C.11199	0.864	-89.6	67.6	40.1	30.3	26.7	0.35120	2-3
4	-10.654	-20.533	16.18514	-60.5	8.3	-82.6	31.0	C.11363	0.851	-89.5	67.7	38.5	31.7	28.4	0.50845	3-4
5	-10.667	-20.530	16.32342	-58.4	8.3	-83.5	31.2	C.11460	0.844	-91.4	67.7	38.5	32.5	28.1	0.45517	4-5
6	-10.667	-20.547	16.08506	-57.0	7.9	-83.6	31.4	C.11292	0.856	-91.4	67.6	40.1	31.1	26.5	0.51369	5-6
7	-10.654	-20.550	15.95080	-59.2	7.9	-82.7	31.2	C.11199	0.864	-89.6	67.6	40.1	30.3	26.7	0.44790	6-7

JULY 31, 1964 13 HR 25 MIN 43 SEC 773 MS

TAB NO 184

ATLAS PHOTO NO 184

POD SEQUENCE NO 973

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				5.027		11.81964	-10.551	-20.762	1747.275	2.608	-64.273	114.776				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.657	-20.547	13.82324	-58.8	8.1	-83.1	31.2	C.09707	0.854	-90.4	67.6	39.3	31.4	27.4	0.	1-2
3	-10.651	-20.555	13.67114	-59.1	7.9	-82.7	31.2	C.09598	0.864	-89.6	67.6	40.1	30.3	26.7	0.30097	2-3
4	-10.651	-20.540	13.87193	-60.5	8.3	-82.6	31.0	C.09739	0.851	-89.5	67.6	38.5	31.7	28.4	0.43575	3-4
5	-10.663	-20.538	13.99041	-58.4	8.3	-83.5	31.2	C.09822	0.844	-91.4	67.6	38.5	32.5	28.1	0.34010	4-5
6	-10.663	-20.553	13.78619	-57.0	7.9	-83.6	31.4	C.09678	0.856	-91.4	67.6	40.1	31.1	26.4	0.44022	5-6
7	-10.651	-20.555	13.67114	-59.1	7.9	-82.7	31.2	C.09558	0.864	-89.6	67.6	40.1	30.3	26.7	0.38389	6-7

JULY 31, 1964 13 HR 25 MIN 44 SEC 613 MS

TAB NO 185

ATLAS PHOTO NO 185

POD SEQUENCE NO 974

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				4.187		9.84618	-10.564	-20.733	1745.301	2.609	-64.254	114.770				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.652	-20.554	11.51869	-58.8	8.1	-83.1	31.2	C.08087	0.854	-90.4	67.6	39.3	31.3	27.4	0.	1-2
3	-10.647	-20.561	11.44000	-59.1	7.9	-82.7	31.2	C.07997	0.864	-89.6	67.6	40.1	30.3	26.7	0.25067	2-3
4	-10.647	-20.548	11.55722	-60.5	8.3	-82.6	31.0	C.08114	0.851	-89.5	67.6	38.5	31.7	28.3	0.36302	3-4
5	-10.658	-20.547	11.65591	-58.4	8.3	-83.5	31.2	C.08163	0.844	-91.4	67.6	38.5	32.5	28.1	0.32495	4-5
6	-10.658	-20.559	11.46584	-57.0	7.9	-83.6	31.4	C.08064	0.857	-91.4	67.6	40.1	31.1	26.4	0.36677	5-6
7	-10.647	-20.561	11.39000	-59.1	7.9	-82.7	31.2	C.07997	0.864	-89.6	67.6	40.1	30.3	26.7	0.31986	6-7

JULY 31, 1964 13 HR 25 MIN 45 SEC 453 MS

TAB NO 186

ATLAS PHOTO NO 186

POD SEQUENCE NO 975

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ				
				3.347		7.87167	-10.578	-20.704	1743.327	2.610	-64.235	114.764				
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.648	-20.561	9.20858	-58.8	8.1	-83.1	31.2	C.06466	0.854	-90.4	67.6	39.3	31.3	27.4	0.	1-2
3	-10.644	-20.566	9.10731	-59.1	7.9	-82.7	31.2	C.06394	0.864	-89.6	67.6	40.1	30.3	26.7	0.20041	2-3
4	-10.644	-20.556	9.24098	-60.5	8.3	-82.6	31.0	C.06488	0.851	-89.5	67.6	38.5	31.7	28.3	0.29025	3-4
5	-10.652	-20.565	9.31367	-58.4	8.3	-83.5	31.2	C.06543	0.844	-91.4	67.6	38.5	32.5	28.0	0.25999	4-5
6	-10.652	-20.565	9.18392	-57.0	7.9	-83.6	31.4	C.06447	0.857	-91.4	67.6	40.1	31.1	26.4	0.29324	5-6
7	-10.644	-20.566	9.10731	-59.1	7.9	-82.7	31.2	C.06394	0.864	-89.6	67.6	40.1	30.3	26.7	0.25574	6-7

RA-VII CAMERA P2

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JULY 31, 1964 13 HR 25 MIN 46 SEC 293 MS TAB NO 187 ATLAS PHOTO NO 187 POD SEQUENCE NO 976

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				2.507		5.89720		-10.591		-20.675		1741.352		2.611		-64.217		114.759	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.643	-20.567	6.89946	-58.8	8.1	-83.1	31.2	0.04845	0.854	-90.4	67.6	39.3	31.3	27.4	0.	1- 2			
3	-10.641	-20.572	6.82361	-59.1	7.9	-82.7	31.2	0.04791	0.864	-89.6	67.6	40.1	30.3	26.7	0.15019	2- 3			
4	-10.640	-20.564	6.92373	-60.5	8.3	-82.6	31.0	0.04861	0.851	-89.5	67.6	38.5	31.7	28.3	0.21745	3- 4			
5	-10.647	-20.563	6.98283	-58.4	8.3	-83.5	31.2	0.04902	0.844	-91.4	67.6	38.5	32.4	28.0	0.19473	4- 5			
6	-10.647	-20.571	6.88099	-57.0	7.9	-83.6	31.4	0.04831	0.857	-91.4	67.6	40.1	31.1	26.4	0.21969	5- 6			
7	-10.641	-20.572	6.82361	-59.1	7.9	-82.7	31.2	0.04791	0.864	-89.6	67.6	40.1	30.3	26.7	0.19162	6- 7			

JULY 31, 1964 13 HR 25 MIN 47 SEC 133 MS TAB NO 188 ATLAS PHOTO NO 188 POD SEQUENCE NO 977

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				1.667		3.92178		-10.604		-20.646		1739.377		2.613		-64.198		114.753	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.639	-20.574	4.58888	-58.8	8.1	-83.1	31.2	0.03222	0.854	-90.4	67.6	39.3	31.3	27.4	0.	1- 2			
3	-10.637	-20.577	4.53845	-59.1	7.9	-82.7	31.2	0.03186	0.864	-89.6	67.6	40.1	30.3	26.7	0.09985	2- 3			
4	-10.637	-20.572	4.60503	-60.5	8.3	-82.6	31.1	0.03233	0.851	-89.5	67.6	38.5	31.7	28.3	0.14462	3- 4			
5	-10.641	-20.571	4.54431	-58.4	8.3	-83.5	31.2	0.03261	0.844	-91.4	67.6	38.5	32.4	28.0	0.12937	4- 5			
6	-10.641	-20.576	4.57660	-57.0	7.9	-83.6	31.4	0.03213	0.857	-91.4	67.6	40.1	31.1	26.4	0.14611	5- 6			
7	-10.637	-20.577	4.53845	-59.1	7.9	-82.7	31.2	0.03186	0.864	-89.6	67.6	40.1	30.3	26.7	0.12740	6- 7			

JULY 31, 1964 13 HR 25 MIN 47 SEC 973 MS TAB NO 189 ATLAS PHOTO NO 189 POD SEQUENCE NO 978

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				0.827		1.94583		-10.617		-20.617		1737.401		2.614		-64.179		114.748	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.634	-20.581	2.27710	-58.8	8.1	-83.1	31.2	0.01599	0.854	-90.4	67.6	39.3	31.3	27.4	0.	1- 2			
3	-10.633	-20.583	2.25209	-59.1	7.9	-82.7	31.2	0.01581	0.864	-89.6	67.6	40.1	30.3	26.7	0.04955	2- 3			
4	-10.633	-20.580	2.28511	-60.5	8.3	-82.6	31.1	0.01604	0.851	-89.5	67.6	38.5	31.6	28.3	0.07177	3- 4			
5	-10.636	-20.580	2.30461	-58.4	8.3	-83.5	31.2	0.01618	0.844	-91.4	67.6	38.5	32.4	28.0	0.06431	4- 5			
6	-10.636	-20.582	2.27102	-57.0	7.9	-83.6	31.4	0.01594	0.857	-91.4	67.6	40.1	31.1	26.4	0.07249	5- 6			
7	-10.633	-20.583	2.25209	-59.1	7.9	-82.7	31.2	0.01581	0.864	-89.6	67.6	40.1	30.3	26.7	0.06328	6- 7			

TIME AND CAMERA-DEPENDENT PARAMETERS

RA-VII CAMERA P3

TAB NO 1															ATLAS PHOTO NO 1															POD SEQUENCE NO 17														
JULY 31,1964 13 HR 12 MIN 20 SEC 581 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					808.219					1701.30881					-4.104					-34.167					3436.764					2.010					-73.545					116.823				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
1	-11.817	-18.105	1859.30907	-52.3	10.3	-82.2	36.6	37.72696	0.808	-91.3	70.0	38.7	34.1	30.5	0.	0-1																												
2	-13.410	-17.715	1877.58667	-55.1	11.3	-82.2	34.9	37.70954	0.809	-90.4	70.6	38.6	36.0	30.7	49.59457	1-2																												
3	-10.953	-21.035	1812.47031	-57.4	8.7	-81.0	33.6	36.34277	0.878	-87.6	67.1	41.0	28.8	25.4	123.29465	2-3																												
4	-10.721	-15.258	1898.63260	-65.0	10.7	-82.2	28.5	38.05760	0.790	-87.4	72.7	36.4	38.0	35.8	172.00580	3-4																												
5	-16.143	-13.798	1967.60098	-53.6	14.7	-84.3	36.0	35.45332	0.723	-93.4	74.6	36.4	43.8	36.4	169.74157	4-5																												
6	-16.112	-20.044	1671.09192	-44.6	11.7	-81.9	41.3	37.50595	0.817	-93.1	68.6	41.0	35.3	25.2	181.73658	5-6																												
7	-10.953	-21.035	1812.47031	-57.4	8.7	-81.0	33.6	36.34277	0.878	-87.6	67.1	41.0	28.8	25.4	158.96812	6-7																												
TAB NO 2															ATLAS PHOTO NO 2															POD SEQUENCE NO 43														
JULY 31,1964 13 HR 12 MIN 42 SEC 419 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					786.380					1659.12665					-4.199					-33.980					3394.582					2.019					-73.403					116.799				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
1	-11.778	-18.184	1813.83926	-52.4	10.2	-82.2	36.6	36.83501	0.808	-91.3	69.9	38.7	34.0	30.4	0.	0-1																												
2	-13.385	-17.732	1833.12794	-55.1	11.3	-82.2	34.9	36.81663	0.810	-90.4	70.5	38.6	35.9	30.6	50.48726	1-2																												
3	-10.987	-20.975	1769.49840	-57.3	8.7	-81.0	33.7	35.48112	0.877	-87.6	67.1	41.0	28.8	25.4	120.40173	2-3																												
4	-10.760	-15.336	1853.55208	-64.9	10.7	-82.1	28.7	37.15400	0.790	-87.4	72.6	36.4	37.9	35.7	167.88923	3-4																												
5	-16.052	-13.916	1920.76249	-53.6	14.6	-84.3	35.9	38.51374	0.724	-93.4	74.5	36.4	43.7	36.2	165.64609	4-5																												
6	-16.023	-20.007	1826.71347	-44.7	11.6	-81.9	41.2	36.61630	0.817	-93.1	68.7	41.0	35.3	25.2	177.31445	5-6																												
7	-10.987	-20.975	1769.49840	-57.3	8.7	-81.0	33.7	35.48112	0.877	-87.6	67.1	41.0	28.8	25.4	155.18982	6-7																												
TAB NO 3															ATLAS PHOTO NO 3															POD SEQUENCE NO 67														
JULY 31,1964 13 HR 13 MIN 2 SEC 578 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					766.221					1620.05197					-4.289					-33.802					3355.507					2.027					-73.270					116.776				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
1	-11.742	-18.258	1771.67700	-52.4	10.2	-82.3	36.6	36.00983	0.809	-91.3	69.9	38.8	33.8	30.2	0.	0-1																												
2	-13.363	-17.743	1792.00085	-55.1	11.3	-82.2	34.9	35.99063	0.810	-90.4	70.5	38.6	35.9	30.6	51.42388	1-2																												
3	-11.018	-20.915	1729.72636	-57.3	8.8	-81.0	33.7	34.68363	0.877	-87.6	67.2	41.0	28.9	25.5	117.73604	2-3																												
4	-10.797	-15.402	1811.86418	-64.8	10.7	-82.1	28.8	36.31839	0.791	-87.4	72.6	36.4	37.9	35.7	164.09854	3-4																												
5	-15.963	-14.018	1877.43945	-53.6	14.6	-84.3	35.9	37.64565	0.726	-93.4	74.4	36.4	43.6	36.1	161.87181	4-5																												
6	-15.941	-19.967	1785.65625	-44.8	11.6	-82.0	41.1	35.79332	0.818	-93.1	68.7	41.0	35.3	25.2	173.25109	5-6																												
7	-11.018	-20.915	1729.72636	-57.3	8.8	-81.0	33.7	34.68363	0.877	-87.6	67.2	41.0	28.9	25.5	151.69985	6-7																												
TAB NO 4															ATLAS PHOTO NO 4															POD SEQUENCE NO 89														
JULY 31,1964 13 HR 13 MIN 21 SEC 57 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					747.742					1584.11505					-4.373					-33.635					3319.570					2.035					-73.145					116.755				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
1	-11.707	-18.326	1732.86754	-52.4	10.2	-82.3	36.5	35.24829	0.809	-91.3	69.8	38.9	33.7	30.1	0.	0-1																												
2	-13.342	-17.759	1754.04720	-55.1	11.3	-82.2	34.9	35.22836	0.810	-90.4	70.5	38.7	35.9	30.6	52.23331	1-2																												
3	-11.046	-20.865	1693.04538	-57.3	8.8	-81.0	33.7	33.94812	0.876	-87.6	67.3	41.0	29.0	25.5	115.26481	2-3																												
4	-10.829	-15.469	1773.38530	-64.7	10.7	-82.1	28.9	35.54711	0.791	-87.4	72.5	36.4	37.8	35.6	160.58614	3-4																												
5	-15.891	-14.119	1837.46037	-53.6	14.5	-84.2	35.9	36.84361	0.727	-93.4	74.3	36.4	43.4	36.0	158.38427	4-5																												
6	-15.885	-19.937	1747.78087	-45.0	11.6	-82.0	41.0	35.03413	0.818	-93.1	68.7	41.0	35.3	25.3	169.48492	5-6																												
7	-11.046	-20.865	1693.04538	-57.3	8.8	-81.0	33.7	33.94812	0.876	-87.6	67.3	41.0	29.0	25.5	148.47742	6-7																												
TAB NO 5															ATLAS PHOTO NO 5															POD SEQUENCE NO 115														
JULY 31,1964 13 HR 13 MIN 42 SEC 896 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					725.904					1541.49576					-4.474					-33.433					3276.951					2.045					-72.994					116.729				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
1	-11.669	-18.407	1686.85860	-52.4	10.2	-82.3	36.5	34.34368	0.809	-91.3	69.7	38.9	33.5	30.0	0.	0-1																												
2	-13.314	-17.780	1708.96671	-55.1	11.3	-82.2	34.9	34.32297	0.810	-90.4	70.5	38.7	35.9	30.6	53.16853	1-2																												
3	-11.078	-20.807	1649.48364	-57.2	8.8	-81.0	33.8	33.07465	0.876	-87.6	67.3	41.0	29.0	25.6	112.32609	2-3																												
4	-10.866	-15.551	1727.68817	-64.5	10.7	-82.0	29.1	34.63115	0.792	-87.4	72.5	36.4	37.7	35.5	156.41487	3-4																												
5	-15.796	-14.240	1789.98079	-53.6	14.4	-84.2	35.9	35.89178	0.729	-93.4	74.2	36.4	43.3	35.9	154.24232	4-5																												
6	-15.772	-19.902	1702.79514	-45.1	11.5	-82.1	40.8	34.13241	0.818	-93.1	68.7	41.0	35.2	25.3	165.01477	5-6																												
7	-11.078	-20.807	1649.48364	-57.2	8.8	-81.0	33.8	33.07465	0.876	-87.6	67.3	41.0	29.0	25.6	144.64849	6-7																												
TAB NO 6															ATLAS PHOTO NO 6															POD SEQUENCE NO 135														
JULY 31,1964 13 HR 13 MIN 59 SEC 695 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					709.105					1508.60016					-4.554					-33.274					3244.055					2.052					-72.876					116.709				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
1	-11.639	-18.469	1651.31195	-52.5	10.2	-82.3	36.4	33.65613	0.809	-91.3	69.7	39.0	33.4	29.9	0.	0-1																												
2	-13.291	-17.757	1674.72278	-55.2	11.3	-82.2	34.8	33.63521	0.810	-90.4	70.5	38.6	35.9	30.6	54.29755	1-2																												
3	-11.099	-20.727	1616.27504	-57.2	8.9	-81.0	33.7	32.40875	0.875	-87.6	67.4	41.0	29.1	25.7	110.15392	2-3																												
4	-10.892	-15.573	1693.08580	-64.5	10.8	-82.0	29.1	33.93753	0.792	-87.4	72.4	36.4	37.8	35.5	153.36049	3-4																												
5	-15.723	-14.289	1754.08955	-53.7	14.4	-84.2	35.8	35.17210	0.730	-93.5	74.1	36.4	43.2	35.8	151.13299	4-5																												
6	-15.698	-19.837	1688.52977	-45.3	11.5	-82.1	40.7	33.44554	0.818	-93.1	68.8	41.0	35.3	25.4	161.76410	5-6																												
7	-11.099	-20.727	1616.27504	-57.2	8.9	-81.0	33.7	32.40875	0.875	-87.6	67.4	41.0	29.1	25.7	141.74149	6-7																												

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JULY 31, 1964 13 HR 14 MIN 16 SEC 494 MS TAB NO 7 ATLAS PHOTO NO 7 POD SEQUENCE NO 155

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				692.306	1475.60550	-4.635	-33.112	3211.061	2.060	-72.755	116.688					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.608	-18.531	1615.64047	-52.6	10.1	-82.3	36.3	32.96694	0.808	-91.3	69.6	39.0	33.3	29.8	0.	0-1
2	-13.267	-17.731	1640.40143	-55.2	11.3	-82.2	34.8	32.94590	0.809	-90.4	70.5	38.6	36.0	30.7	55.53269	1-2
3	-11.120	-20.643	1582.98314	-57.3	8.9	-81.0	33.7	31.74120	0.874	-87.6	67.5	40.9	29.3	25.8	107.98104	2-3
4	-10.916	-15.591	1658.41960	-64.4	10.8	-82.0	29.2	33.24263	0.791	-87.4	72.4	36.3	37.8	35.5	150.31098	3-4
5	-15.647	-14.334	1718.13744	-53.7	14.3	-84.2	35.8	34.45120	0.730	-93.5	74.1	36.4	43.2	35.8	148.02038	4-5
6	-15.624	-19.769	1634.17886	-45.5	11.5	-82.2	40.5	32.75695	0.817	-93.1	68.9	41.0	35.3	25.5	158.52169	5-6
7	-11.120	-20.643	1582.98314	-57.3	8.9	-81.0	33.7	31.74120	0.874	-87.6	67.5	40.9	29.3	25.8	138.82728	6-7

JULY 31, 1964 13 HR 14 MIN 33 SEC 293 MS TAB NO 8 ATLAS PHOTO NO 8 POD SEQUENCE NO 175

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				675.507	1442.51041	-4.718	-32.946	3177.966	2.067	-72.632	116.667					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.578	-18.594	1579.84294	-52.7	10.1	-82.4	36.3	32.26950	0.808	-91.3	69.5	39.1	33.1	29.7	0.	0-1
2	-13.241	-17.721	1605.68492	-55.3	11.3	-82.2	34.7	32.24865	0.809	-90.4	70.6	38.6	36.0	30.7	56.60614	1-2
3	-11.139	-20.574	1549.36491	-57.3	9.0	-81.0	33.7	31.06710	0.873	-87.7	67.6	40.9	29.4	25.9	105.75450	2-3
4	-10.940	-15.627	1623.31393	-64.4	10.8	-82.0	29.2	32.53893	0.791	-87.4	72.4	36.3	37.8	35.5	147.17836	3-4
5	-15.471	-14.399	1681.70314	-53.8	14.3	-84.2	35.7	32.72064	0.731	-93.5	74.0	36.4	43.1	35.8	144.85691	4-5
6	-15.647	-19.717	1599.47426	-45.5	11.5	-82.2	40.3	32.06129	0.817	-93.1	68.9	41.0	35.3	25.6	155.18299	5-6
7	-11.139	-20.574	1549.36491	-57.3	9.0	-81.0	33.7	31.06710	0.873	-87.7	67.6	40.9	29.4	25.9	135.87781	6-7

JULY 31, 1964 13 HR 14 MIN 50 SEC 92 MS TAB NO 9 ATLAS PHOTO NO 9 POD SEQUENCE NO 195

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				658.708	1409.31281	-4.803	-32.777	3144.768	2.075	-72.507	116.645					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.548	-18.657	1563.91664	-52.7	10.1	-82.4	36.2	31.56768	0.808	-91.3	69.5	39.1	33.0	29.5	0.	0-1
2	-13.214	-17.719	1570.70978	-55.3	11.3	-82.2	34.7	31.56621	0.809	-90.4	70.6	38.6	36.0	30.7	57.59751	1-2
3	-11.158	-20.512	1515.52280	-57.3	9.0	-81.1	33.7	30.38851	0.872	-87.7	67.6	40.9	29.4	26.0	103.49789	2-3
4	-10.963	-15.672	1587.93219	-64.3	10.8	-82.0	29.3	31.82971	0.792	-87.4	72.4	36.3	37.8	35.5	144.00236	3-4
5	-15.492	-14.472	1644.97128	-53.8	14.2	-84.2	35.6	32.98410	0.732	-93.5	73.9	36.3	43.1	35.7	141.66378	4-5
6	-15.470	-19.672	1564.52975	-45.8	11.5	-82.3	40.2	31.36683	0.817	-93.1	68.9	40.9	35.3	25.7	151.79562	5-6
7	-11.158	-20.512	1515.52280	-57.3	9.0	-81.1	33.7	30.38851	0.872	-87.7	67.6	40.9	29.4	26.0	132.90522	6-7

JULY 31, 1964 13 HR 15 MIN 5 SEC 211 MS TAB NO 10 ATLAS PHOTO NO 10 POD SEQUENCE NO 213

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				643.589	1379.34598	-4.881	-32.621	3114.801	2.082	-72.392	116.625					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.520	-18.713	1511.47122	-52.8	10.1	-82.4	36.1	30.93254	0.808	-91.4	69.4	39.2	32.9	29.4	0.	0-1
2	-13.189	-17.720	1539.07678	-55.3	11.3	-82.3	34.7	30.91089	0.809	-90.4	70.6	38.6	36.0	30.7	58.46796	1-2
3	-11.175	-20.458	1484.92285	-57.3	9.0	-81.1	33.6	29.77493	0.872	-87.7	67.7	40.9	29.5	26.0	101.45289	2-3
4	-10.983	-15.714	1555.93100	-64.2	10.9	-81.9	29.4	31.18826	0.792	-87.4	72.3	36.3	37.8	35.5	141.12587	3-4
5	-15.420	-14.541	1611.74687	-53.9	14.2	-84.2	35.6	32.31760	0.733	-93.5	73.8	36.3	43.0	35.7	138.77492	4-5
6	-15.398	-19.634	1532.92950	-45.9	11.5	-82.3	40.0	30.72740	0.817	-93.2	69.0	40.9	35.3	25.7	148.72808	5-6
7	-11.175	-20.458	1484.92285	-57.3	9.0	-81.1	33.6	29.77493	0.872	-87.7	67.7	40.9	29.5	26.0	130.21609	6-7

JULY 31, 1964 13 HR 15 MIN 22 SEC 10 MS TAB NO 11 ATLAS PHOTO NO 11 POD SEQUENCE NO 233

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				626.790	1345.94697	-4.969	-32.444	3081.404	2.091	-72.262	116.602					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.490	-18.776	1475.29460	-52.9	10.1	-82.4	36.1	30.22310	0.808	-91.4	69.4	39.2	32.7	29.3	0.	0-1
2	-13.159	-17.723	1503.74593	-55.4	11.3	-82.3	34.6	30.20130	0.809	-90.4	70.6	38.5	36.0	30.7	59.38613	1-2
3	-11.191	-20.400	1450.75658	-57.4	9.0	-81.1	33.6	29.08984	0.871	-87.7	67.8	40.9	29.6	26.1	99.16331	2-3
4	-11.003	-15.764	1520.18910	-64.2	10.9	-81.9	29.4	30.47182	0.792	-87.4	72.3	36.3	37.7	35.4	137.90825	3-4
5	-15.338	-14.620	1574.63403	-53.9	14.1	-84.2	35.6	31.57373	0.734	-93.5	73.8	36.3	42.9	35.6	135.54660	4-5
6	-15.317	-19.594	1497.64027	-46.1	11.5	-82.4	39.9	30.02003	0.817	-93.2	69.0	40.9	35.3	25.8	145.29706	5-6
7	-11.191	-20.400	1450.75658	-57.4	9.0	-81.1	33.6	29.08984	0.871	-87.7	67.8	40.9	29.6	26.1	127.21110	6-7

JULY 31, 1964 13 HR 15 MIN 35 SEC 449 MS TAB NO 12 ATLAS PHOTO NO 12 POD SEQUENCE NO 249

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				613.350	1319.15393	-5.041	-32.300	3054.609	2.097	-72.157	116.583					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.466	-18.826	1446.25616	-52.9	10.1	-82.4	36.0	29.65168	0.808	-91.4	69.3	39.3	32.6	29.2	0.	0-1
2	-13.132	-17.729	1475.30147	-55.4	11.3	-82.3	34.6	29.63002	0.809	-90.4	70.5	38.5	36.0	30.8	60.01238	1-2
3	-11.201	-20.356	1423.26651	-57.4	9.1	-81.1	33.6	28.53863	0.870	-87.7	67.8	40.9	29.7	26.2	97.31155	2-3
4	-11.017	-15.807	1491.41556	-64.1	10.9	-81.9	29.5	29.89509	0.792	-87.4	72.2	36.3	37.7	35.4	135.31160	3-4
5	-15.269	-14.688	1544.73993	-54.0	14.1	-84.2	35.5	30.97431	0.735	-93.5	73.7	36.3	42.8	35.5	132.93988	4-5
6	-15.249	-19.566	1469.23032	-46.2	11.5	-82.4	39.8	29.45056	0.817	-93.2	69.0	40.9	35.3	25.8	142.52594	5-6
7	-11.201	-20.356	1423.26651	-57.4	9.1	-81.1	33.6	28.53863	0.870	-87.7	67.8	40.9	29.7	26.2	124.78682	6-7

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TAR NO 13 ATLAS PHOTO NO 13 POD SEQUENCE NO 267														
JULY 31, 1964 13 HR 15 MIN 50 SEC 568 MS														
TRAJECTORY DATA														
SEC TO IMPACT 598.231 ALT 1288.92587 LAT -5.123 LCN -32.135 R 3024.381 V 2.105 PTH -72.036 AZ 116.562														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.438	-18.883	1413.48285	-53.0	10.1	-82.4	35.9	29.00544	0.808	-91.4	69.3	39.4	32.5	29.1
2	-13.098	-17.739	1443.11598	-55.5	11.3	-82.3	34.5	28.98361	0.809	-90.4	70.5	38.5	36.0	30.8
3	-11.209	-20.310	1492.17763	-57.4	9.1	-81.1	33.6	27.91524	0.870	-87.7	67.8	40.8	29.7	26.2
4	-11.029	-15.860	1458.87027	-64.1	10.9	-81.9	29.5	29.24272	0.793	-87.4	72.2	36.3	37.7	35.4
5	-15.186	-14.768	1510.90015	-54.0	14.0	-84.1	35.4	30.29577	0.736	-93.5	73.6	36.3	42.7	35.5
6	-15.167	-19.536	1437.07806	-46.3	11.4	-82.4	39.6	28.80608	0.817	-93.2	69.0	40.9	35.3	25.9
7	-11.209	-20.310	1492.17763	-57.4	9.1	-81.1	33.6	27.91524	0.870	-87.7	67.8	40.8	29.7	26.2
SCALE 0.0 PT-PT 0-1														
JULY 31, 1964 13 HR 16 MIN 7 SEC 367 MS														
TRAJECTORY DATA														
SEC TO IMPACT 581.432 ALT 1255.23358 LAT -5.216 LCN -31.947 R 2990.689 V 2.114 PTH -71.899 AZ 116.538														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.408	-18.945	1376.43565	-53.1	10.0	-82.5	35.8	28.28237	0.808	-91.4	69.2	39.4	32.4	29.0
2	-13.056	-17.755	1407.11932	-55.5	11.3	-82.3	34.5	28.26065	0.809	-90.4	70.5	38.5	36.0	30.8
3	-11.214	-20.261	1457.42642	-57.5	9.1	-81.1	33.5	27.21843	0.869	-87.7	67.9	40.8	29.8	26.3
4	-11.039	-15.922	1422.47440	-64.0	10.9	-81.8	29.6	28.51319	0.793	-87.4	72.1	36.2	37.7	35.3
5	-15.091	-14.862	1473.03845	-54.1	13.9	-84.1	35.4	29.53659	0.737	-93.5	73.5	36.3	42.6	35.4
6	-15.072	-19.508	1401.11369	-46.5	11.4	-82.5	39.4	28.08532	0.817	-93.2	69.1	40.9	35.3	25.9
7	-11.214	-20.261	1457.42642	-57.5	9.1	-81.1	33.5	27.21843	0.869	-87.7	67.9	40.8	29.8	26.3
SCALE 0.0 PT-PT 0-1														
JULY 31, 1964 13 HR 16 MIN 22 SEC 486 MS														
TRAJECTORY DATA														
SEC TO IMPACT 566.313 ALT 1224.81378 LAT -5.302 LCN -31.775 R 2960.269 V 2.122 PTH -71.773 AZ 116.515														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.381	-19.002	1343.92195	-53.2	10.0	-82.5	35.8	27.62640	0.808	-91.4	69.1	39.5	32.2	28.9
2	-13.015	-17.776	1374.46541	-55.6	11.2	-82.3	34.4	27.60462	0.810	-90.4	70.5	38.5	35.9	30.7
3	-11.216	-20.224	1325.92659	-57.5	9.1	-81.1	33.5	26.58660	0.869	-87.7	67.9	40.8	29.8	26.3
4	-11.045	-15.986	1389.45499	-64.0	10.9	-81.8	29.6	27.85135	0.794	-87.4	72.1	36.2	37.6	35.4
5	-15.001	-14.955	1438.67018	-54.2	13.8	-84.1	35.3	28.84745	0.738	-93.5	73.4	36.3	42.5	35.3
6	-14.983	-19.489	1368.50838	-46.7	11.4	-82.5	39.3	27.43165	0.816	-93.2	69.1	40.9	35.3	26.0
7	-11.216	-20.224	1325.92659	-57.5	9.1	-81.1	33.5	26.58660	0.869	-87.7	67.9	40.8	29.8	26.3
SCALE 0.0 PT-PT 0-1														
JULY 31, 1964 13 HR 16 MIN 34 SEC 245 MS														
TRAJECTORY DATA														
SEC TO IMPACT 554.554 ALT 1201.08581 LAT -5.370 LCN -31.638 R 2936.545 V 2.128 PTH -71.674 AZ 116.497														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.360	-19.046	1318.16409	-53.2	10.0	-82.5	35.7	27.11319	0.809	-91.4	69.1	39.5	32.1	28.8
2	-12.980	-17.795	1348.92137	-55.6	11.2	-82.3	34.4	27.09160	0.810	-90.4	70.5	38.5	35.9	30.7
3	-11.215	-20.197	1301.29678	-57.5	9.1	-81.1	33.5	26.09294	0.869	-87.7	68.0	40.8	29.8	26.4
4	-11.047	-16.038	1363.62479	-64.0	10.9	-81.8	29.7	27.33371	0.794	-87.4	72.0	36.2	37.6	35.4
5	-14.929	-15.031	1411.77643	-54.2	13.8	-84.1	35.2	28.30819	0.740	-93.5	73.3	36.3	42.4	35.2
6	-14.911	-19.477	1342.99628	-46.8	11.4	-82.6	39.1	26.92028	0.818	-93.2	69.1	40.9	35.2	26.0
7	-11.215	-20.197	1301.29678	-57.5	9.1	-81.1	33.5	26.09294	0.869	-87.7	68.0	40.8	29.8	26.4
SCALE 0.0 PT-PT 0-1														
JULY 31, 1964 13 HR 16 MIN 46 SEC 5 MS														
TRAJECTORY DATA														
SEC TO IMPACT 542.795 ALT 1177.30659 LAT -5.439 LCN -31.499 R 2912.764 V 2.134 PTH -71.573 AZ 116.479														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.339	-19.090	1292.33447	-53.3	10.0	-82.5	35.6	26.59749	0.809	-91.4	69.1	39.6	32.0	28.7
2	-12.944	-17.816	1323.25505	-55.7	11.2	-82.3	34.3	26.57631	0.810	-90.4	70.5	38.5	35.9	30.7
3	-11.212	-20.172	1276.55685	-57.6	9.1	-81.1	33.4	25.59686	0.869	-87.7	68.0	40.8	29.9	26.4
4	-11.047	-16.092	1337.68324	-64.0	10.9	-81.8	29.7	26.81364	0.794	-87.4	72.0	36.2	37.5	35.4
5	-14.854	-15.109	1384.74957	-54.3	13.7	-84.1	35.2	27.76626	0.741	-93.5	73.3	36.3	42.3	35.2
6	-14.837	-19.448	1317.36288	-46.9	11.3	-82.6	39.0	26.40648	0.819	-93.2	69.1	40.9	35.2	26.0
7	-11.212	-20.172	1276.55685	-57.6	9.1	-81.1	33.4	25.59686	0.869	-87.7	68.0	40.8	29.9	26.4
SCALE 0.0 PT-PT 0-1														
JULY 31, 1964 13 HR 17 MIN 2 SEC 804 MS														
TRAJECTORY DATA														
SEC TO IMPACT 525.996 ALT 1143.23495 LAT -5.540 LCN -31.296 R 2878.690 V 2.144 PTH -71.426 AZ 116.452														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.309	-19.152	1295.30902	-53.4	9.9	-82.5	35.5	25.85533	0.810	-91.4	69.0	39.6	31.9	28.6
2	-12.891	-17.856	1286.31578	-55.8	11.1	-82.3	34.2	25.83442	0.811	-90.4	70.4	38.5	35.8	30.7
3	-11.208	-20.145	1240.97205	-57.6	9.1	-81.1	33.4	24.88333	0.869	-87.7	68.0	40.8	29.9	26.4
4	-11.048	-16.180	1300.32225	-63.9	10.8	-81.8	29.7	26.06479	0.795	-87.4	71.9	36.2	37.4	35.1
5	-14.747	-15.231	1345.83438	-54.4	13.6	-84.1	35.1	26.98595	0.743	-93.5	73.1	36.3	42.1	35.0
6	-14.730	-19.462	1280.49348	-47.1	11.2	-82.6	38.8	25.66747	0.819	-93.2	69.1	40.9	35.1	26.0
7	-11.208	-20.145	1240.97205	-57.6	9.1	-81.1	33.4	24.88333	0.869	-87.7	68.0	40.8	29.9	26.4
SCALE 0.0 PT-PT 0-1														

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JULY 31, 1964 13 HR 17 MIN 16 SEC 243 MS

TAB NO 19

ATLAS PHOTO NO 19

POD SEQUENCE NO 369

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.285	-19.202	1225.58000	-53.5	9.9	-82.5	35.4	25.25713	0.810	-91.4	68.9	39.7	31.8	28.5	0.	0-1	
2	-12.849	-17.895	1256.54077	-55.8	11.1	-82.3	34.2	25.23642	0.812	-90.4	70.4	38.5	35.8	30.6	61.19502	1-2	
3	-11.205	-20.129	1212.30386	-57.7	9.1	-81.1	33.3	24.30849	0.869	-87.7	68.0	40.8	29.9	26.4	82.83713	2-3	
4	-11.049	-16.258	1270.19289	-63.9	10.8	-81.8	29.8	25.46089	0.796	-87.4	71.8	36.2	37.3	35.0	115.16138	3-4	
5	-14.660	-15.336	1314.45576	-54.4	13.5	-84.1	33.0	26.35676	0.744	-93.5	72.0	36.3	41.7	34.7	112.71434	4-5	
6	-14.645	-19.465	1250.79283	-47.2	11.2	-82.7	38.7	25.07216	0.820	-93.2	69.0	40.9	35.1	26.0	120.97811	5-6	
7	-11.205	-20.129	1212.30386	-57.7	9.1	-81.1	33.3	24.30849	0.869	-87.7	68.0	40.8	29.9	26.4	106.01764	6-7	

JULY 31, 1964 13 HR 17 MIN 28 SEC 2 MS

TAB NO 20

ATLAS PHOTO NO 20

POD SEQUENCE NO 383

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.264	-19.246	1199.48672	-53.5	9.9	-82.6	35.4	24.73266	0.811	-91.4	68.9	39.8	31.7	28.4	0.	0-1	
2	-12.812	-17.922	1230.44643	-55.8	11.0	-82.3	34.2	24.71234	0.812	-90.4	70.3	38.5	35.7	30.6	61.05869	1-2	
3	-11.203	-20.113	1187.16788	-57.7	9.1	-81.1	33.3	23.80447	0.868	-87.7	68.1	40.8	29.9	26.5	81.09629	2-3	
4	-11.050	-16.323	1243.79317	-63.9	10.8	-81.8	29.8	24.93174	0.797	-87.4	71.7	36.2	37.3	34.9	112.73872	3-4	
5	-14.585	-15.426	1286.97801	-54.4	13.4	-84.1	33.0	25.80579	0.746	-93.5	72.9	36.3	41.9	34.8	110.30311	4-5	
6	-14.570	-19.464	1224.75222	-47.2	11.1	-82.7	38.6	24.55041	0.820	-93.2	69.0	40.9	35.0	26.0	118.39081	5-6	
7	-11.203	-20.113	1187.16788	-57.7	9.1	-81.1	33.3	23.80447	0.868	-87.7	68.1	40.8	29.9	26.5	103.78033	6-7	

JULY 31, 1964 13 HR 17 MIN 41 SEC 441 MS

TAB NO 21

ATLAS PHOTO NO 21

POD SEQUENCE NO 399

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.240	-19.295	1169.57292	-53.6	9.8	-82.6	35.3	24.12976	0.811	-91.4	68.9	39.8	31.5	28.3	0.	0-1	
2	-12.771	-17.969	1200.42641	-55.9	11.0	-82.3	34.1	24.10942	0.813	-90.4	70.3	38.5	35.6	30.6	60.78071	1-2	
3	-11.201	-20.102	1158.26320	-57.7	9.1	-81.2	33.3	23.22489	0.868	-87.7	68.1	40.8	29.9	26.5	79.08711	2-3	
4	-11.051	-16.406	1213.40599	-63.9	10.8	-81.7	29.8	24.32267	0.798	-87.4	71.7	36.3	37.2	34.8	109.93721	3-4	
5	-14.499	-15.535	1255.35724	-54.5	13.3	-84.1	34.9	25.17175	0.747	-93.5	72.8	36.3	41.7	34.7	107.53111	4-5	
6	-14.485	-19.470	1194.83528	-47.4	11.1	-82.7	38.4	23.95055	0.821	-93.2	69.0	40.9	34.9	26.0	115.40006	5-6	
7	-11.201	-20.102	1158.26320	-57.7	9.1	-81.2	33.3	23.22489	0.868	-87.7	68.1	40.8	29.9	26.5	101.20995	6-7	

JULY 31, 1964 13 HR 17 MIN 53 SEC 201 MS

TAB NO 22

ATLAS PHOTO NO 22

POD SEQUENCE NO 413

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.219	-19.339	1143.31537	-53.6	9.8	-82.6	35.3	23.60036	0.812	-91.4	68.8	39.9	31.4	28.2	0.	0-1	
2	-12.734	-18.006	1174.07600	-55.9	11.0	-82.4	34.1	23.58020	0.813	-90.4	70.3	38.5	35.6	30.5	60.53602	1-2	
3	-11.198	-20.091	1132.88725	-57.7	9.1	-81.2	33.3	22.71607	0.868	-87.7	68.1	40.9	29.9	26.5	77.32590	2-3	
4	-11.053	-16.477	1186.73714	-63.8	10.8	-81.7	29.9	23.78812	0.799	-87.4	71.6	36.3	37.1	34.7	107.48242	3-4	
5	-14.423	-15.631	1227.61430	-54.5	13.3	-84.0	34.9	24.61546	0.749	-93.5	72.7	36.3	41.6	34.6	105.10225	4-5	
6	-14.410	-19.475	1168.56619	-47.5	11.0	-82.8	38.3	23.42401	0.822	-93.2	69.0	40.9	34.9	26.0	112.78215	5-6	
7	-11.198	-20.091	1132.88725	-57.7	9.1	-81.2	33.3	22.71607	0.868	-87.7	68.1	40.9	29.9	26.5	98.95549	6-7	

JULY 31, 1964 13 HR 18 MIN 3 SEC 200 MS

TAB NO 23

ATLAS PHOTO NO 23

POD SEQUENCE NO 425

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.201	-19.376	1120.74658	-53.7	9.8	-82.6	35.2	23.14475	0.812	-91.4	68.8	39.9	31.3	28.1	0.	0-1	
2	-12.701	-18.039	1151.40012	-55.9	10.9	-82.4	34.1	23.12477	0.814	-90.4	70.2	38.5	35.5	30.5	60.27653	1-2	
3	-11.196	-20.082	1111.05182	-57.8	9.1	-81.2	33.2	22.27823	0.868	-87.7	68.1	40.9	29.9	26.5	75.80937	2-3	
4	-11.053	-16.540	1163.76972	-63.8	10.7	-81.7	29.9	23.32817	0.799	-87.4	71.5	36.3	37.1	34.7	105.37055	3-4	
5	-14.357	-15.714	1203.76265	-54.6	13.2	-84.0	34.9	24.13680	0.750	-93.5	72.6	36.3	41.5	34.5	103.01233	4-5	
6	-14.344	-19.480	1145.96056	-47.6	11.0	-82.8	38.2	22.97090	0.822	-93.2	69.0	40.9	34.8	26.0	110.53075	5-6	
7	-11.196	-20.082	1111.05182	-57.8	9.1	-81.2	33.2	22.27823	0.868	-87.7	68.1	40.9	29.9	26.5	97.01487	6-7	

JULY 31, 1964 13 HR 18 MIN 16 SEC 719 MS

TAB NO 24

ATLAS PHOTO NO 24

POD SEQUENCE NO 441

TRAJECTORY DATA

PHOTO DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-11.178	-19.425	1090.56425	-53.7	9.8	-82.6	35.2	22.53428	0.813	-91.4	68.7	40.0	31.2	28.0	0.	0-1	
2	-12.656	-18.085	1121.01817	-56.0	10.9	-82.4	34.0	22.51458	0.815	-90.4	70.2	38.5	35.4	30.4	59.84183	1-2	
3	-11.190	-20.074	1081.80138	-57.8	9.1	-81.2	33.2	21.69172	0.869	-87.7	68.1	40.9	29.9	26.5	73.77476	2-3	
4	-11.051	-16.626	1133.04590	-63.8	10.7	-81.7	30.0	22.71195	0.800	-87.4	71.5	36.3	37.0	34.6	102.53954	3-4	
5	-14.267	-15.827	1171.75888	-54.6	13.1	-84.0	34.8	23.49348	0.752	-93.5	72.5	36.3	41.3	34.4	100.21223	4-5	
6	-14.255	-19.489	1115.67471	-47.8	10.9	-82.8	38.1	22.36386	0.823	-93.2	69.0	40.9	34.8	26.0	107.51368	5-6	
7	-11.190	-20.074	1081.80138	-57.8	9.1	-81.2	33.2	21.69172	0.869	-87.7	68.1	40.9	29.9	26.5	94.41401	6-7	

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JULY 31, 1964 13 HR 18 MIN 26 SEC 799 MS TAB NO 25 ATLAS PHOTO NO 25 POD SEQUENCE NO 453

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
442.001 971.01318 -6.079 -30.202 2706.468 2.193 -70.643 116.306

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.160	-19.462	1067.85828	-53.8	9.7	-82.6	35.1	22.07433	0.814	-91.4	68.7	40.0	31.1	28.0	0.	0-1
2	-12.622	-18.122	1098.12790	-56.0	10.9	-82.4	34.0	22.05485	0.815	-90.4	70.1	38.6	35.4	30.4	59.46433	1-2
3	-11.186	-20.068	1059.76535	-57.8	9.0	-81.2	33.2	21.24986	0.869	-87.7	68.1	40.9	29.9	26.5	72.24100	2-3
4	-11.050	-16.693	1109.88181	-63.7	10.7	-81.7	30.0	22.24765	0.801	-87.4	71.4	36.3	36.9	34.5	100.40530	3-4
5	-14.198	-15.914	1147.66489	-54.6	13.0	-84.0	34.8	23.01235	0.753	-93.5	72.4	36.3	41.2	34.3	98.10448	4-5
6	-14.187	-19.498	1092.86086	-47.8	10.9	-82.9	38.0	21.90658	0.824	-93.1	69.0	40.9	34.7	26.0	105.24053	5-6
7	-11.186	-20.068	1059.76535	-57.8	9.0	-81.2	33.2	21.24986	0.869	-87.7	68.1	40.9	29.9	26.5	92.45560	6-7

JULY 31, 1964 13 HR 16 MIN 36 SEC 878 MS TAB NO 26 ATLAS PHOTO NO 26 POD SEQUENCE NO 465

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
431.921 950.13010 -6.149 -30.061 2685.585 2.200 -70.542 116.287

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.143	-19.458	1045.09282	-53.8	9.7	-82.6	35.1	21.61360	0.814	-91.4	68.7	40.1	31.0	27.9	0.	0-1
2	-12.587	-18.157	1075.20027	-56.0	10.8	-82.4	34.0	21.59437	0.816	-90.4	70.1	38.6	35.3	30.3	59.11245	1-2
3	-11.182	-20.062	1037.68597	-57.8	9.0	-81.2	33.2	20.80714	0.869	-87.7	68.1	40.9	29.9	26.5	70.70854	2-3
4	-11.048	-16.758	1086.68578	-63.7	10.7	-81.7	30.1	21.78272	0.802	-87.4	71.3	36.3	36.8	34.4	98.27422	3-4
5	-14.130	-15.999	1123.54578	-54.7	13.0	-84.0	34.7	22.52873	0.755	-93.5	72.3	36.3	41.1	34.2	95.99738	4-5
6	-14.119	-19.505	1070.00685	-47.9	10.8	-82.9	37.9	21.44849	0.824	-93.1	69.0	40.9	34.6	26.0	102.97312	5-6
7	-11.182	-20.062	1037.68597	-57.8	9.0	-81.2	33.2	20.80714	0.869	-87.7	68.1	40.9	29.9	26.5	90.49536	6-7

JULY 31, 1964 13 HR 18 MIN 45 SEC 278 MS TAB NO 27 ATLAS PHOTO NO 27 POD SEQUENCE NO 475

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
423.522 932.69031 -6.207 -29.942 2668.146 2.205 -70.458 116.270

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.129	-19.529	1026.07501	-53.8	9.7	-82.6	35.0	21.22852	0.815	-91.4	68.6	40.1	30.9	27.8	0.	0-1
2	-12.558	-18.187	1056.03772	-56.1	10.8	-82.4	33.9	21.20951	0.816	-90.4	70.1	38.6	35.3	30.3	58.80481	1-2
3	-11.178	-20.056	1019.23119	-57.8	9.0	-81.2	33.2	20.43709	0.869	-87.7	68.1	40.9	29.8	26.5	69.42834	2-3
4	-11.047	-16.813	1067.29959	-63.7	10.7	-81.7	30.1	21.39414	0.802	-87.4	71.3	36.3	36.8	34.4	96.49407	3-4
5	-14.072	-16.070	1103.39256	-54.7	12.9	-84.0	34.7	22.12463	0.756	-93.5	72.3	36.4	41.0	34.1	94.23845	4-5
6	-14.062	-19.511	1050.90718	-48.0	10.8	-82.9	37.8	21.06565	0.825	-93.1	68.9	40.9	34.6	26.0	101.08036	5-6
7	-11.178	-20.056	1019.23119	-57.8	9.0	-81.2	33.2	20.43709	0.869	-87.7	68.1	40.9	29.8	26.5	88.85786	6-7

JULY 31, 1964 13 HR 18 MIN 57 SEC 37 MS TAB NO 28 ATLAS PHOTO NO 28 POD SEQUENCE NO 489

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
411.762 908.21759 -6.290 -29.772 2643.673 2.213 -70.338 116.247

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.108	-19.571	999.37849	-53.9	9.7	-82.6	35.0	20.68690	0.816	-91.4	68.6	40.2	30.8	27.7	0.	0-1
2	-12.517	-18.231	1029.08434	-56.1	10.7	-82.4	33.9	20.66818	0.817	-90.4	70.0	38.6	35.2	30.2	58.30042	1-2
3	-11.172	-20.052	993.27764	-57.9	9.0	-81.2	33.1	19.91668	0.869	-87.7	68.1	40.9	29.8	26.5	67.62559	2-3
4	-11.045	-16.892	1040.02704	-63.7	10.6	-81.6	30.1	20.84749	0.803	-87.4	71.2	36.3	36.7	34.3	93.98583	3-4
5	-13.992	-16.174	1075.04556	-54.7	12.8	-84.0	34.6	21.55623	0.757	-93.5	72.2	36.4	40.9	34.0	91.76605	4-5
6	-13.982	-19.522	1024.04951	-48.1	10.7	-82.9	37.7	20.52732	0.825	-93.1	68.9	41.0	34.5	25.9	98.41463	5-6
7	-11.172	-20.052	993.27764	-57.9	9.0	-81.2	33.1	19.91668	0.869	-87.7	68.1	40.9	29.8	26.5	86.55652	6-7

JULY 31, 1964 13 HR 19 MIN 7 SEC 116 MS TAB NO 29 ATLAS PHOTO NO 29 POD SEQUENCE NO 501

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
401.683 887.18747 -6.363 -29.624 2622.643 2.220 -70.233 116.227

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.091	-19.607	976.42873	-53.9	9.6	-82.7	34.9	20.22028	0.816	-91.4	68.5	40.2	30.7	27.6	0.	0-1
2	-12.481	-18.272	1005.86605	-56.1	10.7	-82.4	33.9	20.20182	0.816	-90.4	70.0	38.6	35.1	30.2	57.79320	1-2
3	-11.167	-20.051	970.92262	-57.9	9.0	-81.2	33.1	19.46843	0.869	-87.6	68.1	40.9	29.8	26.4	66.07057	2-3
4	-11.042	-16.964	1016.52871	-63.6	10.6	-81.6	30.2	20.37650	0.804	-87.4	71.1	36.3	36.6	34.2	91.82160	3-4
5	-13.922	-16.265	1050.62477	-54.8	12.7	-84.0	34.6	21.06656	0.759	-93.5	72.1	36.4	40.7	33.9	89.63740	4-5
6	-13.913	-19.534	1000.91732	-48.2	10.7	-83.0	37.6	20.06365	0.826	-93.1	68.9	41.0	34.5	25.9	96.11563	5-6
7	-11.167	-20.051	970.92262	-57.9	9.0	-81.2	33.1	19.46843	0.869	-87.6	68.1	40.9	29.8	26.4	84.57490	6-7

JULY 31, 1964 13 HR 19 MIN 17 SEC 196 MS TAB NO 30 ATLAS PHOTO NO 30 POD SEQUENCE NO 513

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ
391.604 866.10684 -6.437 -29.474 2601.562 2.227 -70.127 116.206

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.074	-19.643	953.41566	-54.0	9.6	-82.7	34.9	19.75212	0.817	-91.4	68.5	40.3	30.6	27.5	0.	0-1
2	-12.445	-18.314	982.56734	-56.1	10.7	-82.4	33.9	19.73393	0.818	-90.4	69.9	38.6	35.1	30.1	57.26286	1-2
3	-11.161	-20.050	948.49193	-57.9	9.0	-81.2	33.1	19.01866	0.869	-87.6	68.1	41.0	29.8	26.4	64.51150	2-3
4	-11.040	-17.036	992.95451	-63.6	10.6	-81.6	30.2	19.90398	0.805	-87.4	71.1	36.4	36.5	34.1	89.65213	3-4
5	-13.852	-16.357	1026.13104	-54.8	12.7	-83.9	34.6	20.57542	0.760	-93.5	72.0	36.4	40.6	33.8	87.50450	4-5
6	-13.843	-19.547	977.71027	-48.3	10.6	-83.0	37.5	19.59849	0.827	-93.1	68.9	41.0	34.4	25.9	93.81269	5-6
7	-11.161	-20.050	948.49193	-57.9	9.0	-81.2	33.1	19.01866	0.869	-87.6	68.1	41.0	29.8	26.4	82.58797	6-7

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JULY 31, 1964 13 HR 19 MIN 27 SEC 275 MS TAB NO 31 ATLAS PHOTO NO 31 POD SEQUENCE NO 525

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				381.524	844.97543	-6.511	-29.321	2580.431	2.233	-70.019	116.185		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.057	-19.679	930.33885	-54.0	9.6	-82.7	34.8	19.28265	0.818	-91.4	68.5 40.3 30.5	27.5	0- 1
2	-12.409	-18.355	959.20646	-56.2	10.6	-82.4	33.8	19.26475	0.819	-90.4	69.9 38.6 35.0	30.1	56.72664 1- 2
3	-11.156	-20.048	925.99523	-57.9	9.0	-81.2	33.1	18.56757	0.869	-87.6	68.1 41.0 29.8	26.4	62.95034 2- 3
4	-11.037	-17.108	969.31847	-63.6	10.6	-81.6	30.3	19.43022	0.806	-87.4	71.0 36.4 36.4	34.0	87.48036 3- 4
5	-13.781	-16.449	1001.58003	-54.8	12.6	-83.9	34.5	20.08314	0.762	-93.5	71.9 36.4 40.5	33.7	85.36917 4- 5
6	-13.773	-19.559	954.43909	-48.4	10.6	-83.0	37.4	19.13204	0.827	-93.1	68.9 41.0 34.3	25.9	91.50931 5- 6
7	-11.156	-20.048	925.99523	-57.9	9.0	-81.2	33.1	18.56757	0.869	-87.6	68.1 41.0 29.8	26.4	80.59702 6- 7

JULY 31, 1964 13 HR 19 MIN 37 SEC 355 MS TAB NO 32 ATLAS PHOTO NO 32 POD SEQUENCE NO 537

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				371.445	823.79272	-6.587	-29.165	2559.248	2.240	-69.910	116.163		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.040	-19.714	907.19772	-54.1	9.6	-82.7	34.8	18.81234	0.818	-91.4	68.4 40.4 30.4	27.4	0- 1
2	-12.370	-18.393	935.80765	-56.2	10.6	-82.4	33.8	18.79480	0.820	-90.4	69.9 38.6 35.0	30.0	56.20040 1- 2
3	-11.148	-20.044	903.45478	-57.9	9.0	-81.2	33.1	18.11560	0.869	-87.6	68.1 41.0 29.8	26.4	61.39038 2- 3
4	-11.032	-17.176	945.65813	-63.6	10.5	-81.6	30.3	18.95596	0.807	-87.4	70.9 36.4 36.3	33.9	85.31591 3- 4
5	-13.784	-16.537	977.00305	-54.9	12.5	-83.9	34.5	19.59033	0.763	-93.4	71.8 36.4 40.4	33.6	83.23153 4- 5
6	-13.701	-19.568	931.11436	-48.5	10.5	-83.0	37.3	18.66461	0.828	-93.1	68.9 41.0 34.3	25.9	89.21512 5- 6
7	-11.148	-20.044	903.45478	-57.9	9.0	-81.2	33.1	18.11560	0.869	-87.4	68.1 41.0 29.8	26.4	78.60098 6- 7

JULY 31, 1964 13 HR 19 MIN 45 SEC 754 MS TAB NO 33 ATLAS PHOTO NO 33 POD SEQUENCE NO 547

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				363.045	806.10056	-6.652	-29.034	2541.556	2.246	-69.818	116.144		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.026	-19.744	887.86346	-54.1	9.6	-82.7	34.7	18.41957	0.819	-91.4	68.4 40.4 30.3	27.3	0- 1
2	-12.338	-18.424	916.26711	-56.3	10.6	-82.4	33.7	18.40235	0.820	-90.4	69.8 38.6 34.9	30.0	55.76968 1- 2
3	-11.141	-20.039	884.62650	-58.0	9.0	-81.2	33.0	17.73806	0.869	-87.6	68.1 41.0 29.8	26.4	60.08984 2- 3
4	-11.027	-17.232	925.90308	-63.5	10.5	-81.6	30.3	18.55999	0.807	-87.4	70.9 36.4 36.3	33.9	83.51259 3- 4
5	-13.646	-16.609	956.48796	-54.9	12.5	-83.9	34.4	19.17898	0.764	-93.4	71.7 36.4 40.3	33.5	81.44900 4- 5
6	-13.640	-19.575	911.64326	-48.6	10.5	-83.0	37.2	18.27422	0.828	-93.1	68.8 41.0 34.2	25.9	87.30523 5- 6
7	-11.141	-20.039	884.62650	-58.0	9.0	-81.2	33.0	17.73806	0.869	-87.6	68.1 41.0 29.8	26.4	76.93483 6- 7

JULY 31, 1964 13 HR 19 MIN 52 SEC 474 MS TAB NO 34 ATLAS PHOTO NO 34 POD SEQUENCE NO 555

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				356.326	791.92047	-6.704	-28.927	2527.376	2.251	-69.743	116.129		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-11.015	-19.767	872.36292	-54.2	9.5	-82.7	34.7	18.10529	0.819	-91.4	68.4 40.5 30.3	27.2	0- 1
2	-12.312	-18.446	900.63236	-56.3	10.5	-82.4	33.7	18.08834	0.820	-90.4	69.8 38.6 34.9	30.0	55.47050 1- 2
3	-11.135	-20.034	869.55449	-58.0	9.0	-81.2	33.0	17.43585	0.869	-87.6	68.1 41.0 29.8	26.4	59.05290 2- 3
4	-11.024	-17.275	910.10123	-63.5	10.5	-81.6	30.3	18.24325	0.808	-87.4	70.8 36.4 36.2	33.8	82.07540 3- 4
5	-13.598	-16.664	940.06480	-55.0	12.4	-83.9	34.4	18.85007	0.765	-93.4	71.7 36.4 40.2	33.5	80.02606 4- 5
6	-13.591	-19.578	896.05711	-48.7	10.5	-83.1	37.1	17.96181	0.829	-93.1	68.8 41.0 34.2	25.9	85.78473 5- 6
7	-11.135	-20.034	869.55449	-58.0	9.0	-81.2	33.0	17.43585	0.869	-87.6	68.1 41.0 29.8	26.4	75.60285 6- 7

JULY 31, 1964 13 HR 20 MIN 2 SEC 553 MS TAB NO 35 ATLAS PHOTO NO 35 POD SEQUENCE NO 567

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				346.246	770.60593	-6.783	-28.764	2506.061	2.259	-69.629	116.106		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-10.999	-19.802	849.05649	-54.2	9.5	-82.7	34.6	17.63161	0.820	-91.4	68.4 40.5 30.2	27.1	0- 1
2	-12.273	-18.483	877.06743	-56.3	10.5	-82.4	33.7	17.61506	0.821	-90.4	69.8 38.6 34.8	30.0	54.94031 1- 2
3	-11.127	-20.029	846.84293	-58.1	8.9	-81.3	33.0	16.98045	0.869	-87.6	68.1 41.0 29.8	26.4	57.48754 2- 3
4	-11.019	-17.343	886.27911	-63.5	10.5	-81.6	30.3	17.76575	0.808	-87.4	70.8 36.4 36.2	33.8	79.90412 3- 4
5	-13.524	-16.751	915.35898	-55.0	12.3	-83.9	34.3	18.35428	0.766	-93.4	71.6 36.4 40.1	33.4	77.88213 4- 5
6	-13.518	-19.586	872.57267	-48.8	10.4	-83.1	37.0	17.49107	0.829	-93.1	68.8 41.0 34.1	25.9	83.48819 5- 6
7	-11.127	-20.029	846.84293	-58.1	8.9	-81.3	33.0	16.98045	0.869	-87.6	68.1 41.0 29.8	26.4	73.59671 6- 7

JULY 31, 1964 13 HR 20 MIN 9 SEC 273 MS TAB NO 36 ATLAS PHOTO NO 36 POD SEQUENCE NO 575

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				339.527	756.36642	-6.836	-28.655	2491.822	2.264	-69.553	116.090		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
1	-10.988	-19.825	833.48140	-54.3	9.5	-82.7	34.6	17.31401	0.820	-91.4	68.3 40.6 30.1	27.1	0- 1
2	-12.246	-18.511	861.26640	-56.4	10.5	-82.4	33.6	17.29771	0.821	-90.4	69.7 38.6 34.8	29.2	54.50962 1- 2
3	-11.122	-20.028	831.61979	-58.1	8.9	-81.3	33.0	16.67520	0.870	-87.6	68.1 41.0 29.8	26.4	56.43504 2- 3
4	-11.015	-17.392	870.30021	-63.5	10.5	-81.6	30.4	17.44547	0.809	-87.4	70.7 36.4 36.1	33.7	78.44275 3- 4
5	-13.475	-16.813	898.77492	-55.1	12.3	-83.9	34.3	18.02174	0.767	-93.4	71.5 36.4 40.0	33.3	76.44454 4- 5
6	-13.469	-19.595	856.83218	-48.8	10.4	-83.1	36.9	17.17556	0.830	-93.1	68.8 41.0 34.1	25.9	81.94266 5- 6
7	-11.122	-20.028	831.61979	-58.1	8.9	-81.3	33.0	16.67520	0.870	-87.6	68.1 41.0 29.8	26.4	72.25240 6- 7

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JULY 31, 1964 13 HR 20 MIN 15 SEC 992 MS

TAB NO 37 ATLAS PHOTO NO 37 POD SEQUENCE NO 583

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ

332.807 742.10269 -6.890 -28.543 2477.558 2.269 -69.475 116.075

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.977	-19.848	817.87596	-54.3	9.5	-82.7	34.5	16.99574	0.821	-91.4	68.3	40.6	30.0	27.0	0.	0-1
2	-12.220	-18.540	845.43177	-56.4	10.5	-82.4	33.6	16.97969	0.822	-90.4	69.7	38.7	34.7	29.9	54.07297	1-2
3	-11.116	-20.028	816.36243	-58.1	8.9	-81.3	32.9	16.36927	0.870	-87.6	68.1	41.0	29.8	26.4	55.38126	2-3
4	-11.012	-17.440	854.28725	-63.5	10.4	-81.5	30.4	17.12450	0.810	-87.4	70.7	36.4	36.1	33.7	76.97915	3-4
5	-13.425	-16.875	882.16008	-55.1	12.2	-83.9	34.2	17.68859	0.768	-93.4	71.4	36.4	39.9	33.3	75.00604	4-5
6	-13.420	-19.604	841.05948	-48.9	10.3	-83.1	36.8	16.85941	0.830	-93.1	68.8	41.0	34.0	25.9	80.39577	5-6
7	-11.116	-20.028	816.36243	-58.1	8.9	-81.3	32.9	16.36927	0.870	-87.6	68.1	41.0	29.8	26.4	70.90628	6-7

JULY 31, 1964 13 HR 20 MIN 22 SEC 712 MS

TAB NO 38 ATLAS PHOTO NO 38 POD SEQUENCE NO 591

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ

326.088 727.81461 -6.545 -28.431 2463.270 2.274 -69.397 116.058

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.966	-19.871	802.23996	-54.4	9.5	-82.7	34.5	16.67687	0.821	-91.4	68.3	40.7	30.0	27.0	0.	0-1
2	-12.194	-18.868	829.56744	-56.4	10.4	-82.4	33.6	16.66107	0.822	-90.4	69.7	38.7	34.7	29.9	53.63682	1-2
3	-11.111	-20.027	801.07379	-58.1	8.9	-81.3	32.9	16.06271	0.870	-87.6	68.1	41.0	29.7	26.4	54.32683	2-3
4	-11.008	-17.489	838.24392	-63.5	10.4	-81.5	30.4	16.80292	0.810	-87.4	70.6	36.4	36.0	33.6	75.51388	3-4
5	-13.376	-16.736	865.51950	-55.1	12.2	-83.9	34.2	17.35492	0.769	-93.4	71.4	36.4	39.8	33.2	73.56709	4-5
6	-13.371	-19.612	825.25882	-49.0	10.3	-83.1	36.8	16.54269	0.830	-93.1	68.8	41.0	34.0	25.8	78.84824	5-6
7	-11.111	-20.027	801.07379	-58.1	8.9	-81.3	32.9	16.06271	0.870	-87.6	68.1	41.0	29.7	26.4	69.55907	6-7

JULY 31, 1964 13 HR 20 MIN 29 SEC 431 MS

TAB NO 39 ATLAS PHOTO NO 39 POD SEQUENCE NO 599

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ

319.368 713.50185 -7.000 -28.317 2448.957 2.279 -69.318 116.042

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.956	-19.893	786.57309	-54.4	9.5	-82.7	34.4	16.35730	0.821	-91.4	68.3	40.7	29.9	26.9	0.	0-1
2	-12.158	-18.596	813.66896	-56.4	10.4	-82.4	33.6	16.34176	0.823	-90.4	69.6	38.7	34.6	29.8	53.19386	1-2
3	-11.105	-20.027	785.75050	-58.1	8.9	-81.3	32.9	15.75545	0.870	-87.6	68.1	41.0	29.7	26.4	53.27109	2-3
4	-11.005	-17.338	822.16700	-63.5	10.4	-81.5	30.4	16.48067	0.811	-87.4	70.6	36.4	36.0	33.6	74.04673	3-4
5	-13.326	-16.998	848.84731	-55.1	12.1	-83.9	34.2	17.02062	0.770	-93.4	71.3	36.4	39.8	33.1	72.12654	4-5
6	-13.327	-19.620	809.42441	-49.1	10.3	-83.2	36.7	16.22530	0.831	-93.1	68.8	41.0	34.0	25.8	77.29955	5-6
7	-11.105	-20.027	785.75050	-58.1	8.9	-81.3	32.9	15.75545	0.870	-87.6	68.1	41.0	29.7	26.4	68.20982	6-7

JULY 31, 1964 13 HR 20 MIN 36 SEC 151 MS

TAB NO 40 ATLAS PHOTO NO 40 POD SEQUENCE NO 607

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ

312.648 699.16446 -7.056 -28.202 2434.620 2.284 -69.238 116.025

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.945	-19.916	770.87513	-54.4	9.4	-82.7	34.4	16.03795	0.822	-91.4	68.2	40.7	29.8	26.8	0.	0-1
2	-12.142	-18.621	797.78167	-56.5	10.4	-82.4	33.5	16.02268	0.823	-90.4	69.6	38.7	34.6	29.8	52.81337	1-2
3	-11.100	-20.024	770.42931	-58.2	8.9	-81.3	32.9	15.44824	0.870	-87.6	68.2	41.0	29.7	26.4	52.22034	2-3
4	-11.001	-17.594	806.10734	-63.5	10.4	-81.5	30.4	16.15876	0.811	-87.4	70.5	36.4	35.9	33.5	72.58777	3-4
5	-13.277	-17.056	832.19984	-55.2	12.1	-83.9	34.1	16.68662	0.771	-93.4	71.3	36.4	39.7	33.1	70.69034	4-5
6	-13.273	-19.626	793.59677	-49.1	10.3	-83.2	36.6	15.90804	0.831	-93.1	68.8	41.0	33.9	25.8	75.76116	5-6
7	-11.100	-20.024	770.42931	-58.2	8.9	-81.3	32.9	15.44824	0.870	-87.6	68.2	41.0	29.7	26.4	66.86230	6-7

JULY 31, 1964 13 HR 20 MIN 44 SEC 551 MS

TAB NO 41 ATLAS PHOTO NO 41 POD SEQUENCE NO 617

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ

304.249 681.20749 -7.127 -28.056 2416.663 2.290 -69.137 116.004

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.932	-19.943	751.70852	-54.5	9.4	-82.7	34.3	15.63768	0.822	-91.4	68.2	40.8	29.7	26.8	0.	0-1
2	-12.109	-18.654	777.86969	-56.5	10.4	-82.4	33.5	15.62277	0.823	-90.4	69.6	38.7	34.6	29.8	52.32193	1-2
3	-11.091	-20.020	751.22511	-58.2	8.9	-81.3	32.9	15.06316	0.870	-87.6	68.2	41.0	29.7	26.4	50.90437	2-3
4	-10.997	-17.642	785.98035	-63.5	10.4	-81.5	30.5	15.75532	0.812	-87.4	70.5	36.4	35.9	33.5	70.76056	3-4
5	-13.215	-17.129	811.34003	-55.2	12.0	-83.9	34.1	16.26855	0.772	-93.4	71.2	36.4	39.6	33.0	68.89221	4-5
6	-13.211	-19.633	773.76029	-49.2	10.7	-83.2	36.5	15.10442	0.832	-93.1	68.8	41.0	33.9	25.8	73.83566	5-6
7	-11.091	-20.020	751.22511	-58.2	8.9	-81.3	32.9	15.06316	0.870	-87.6	68.2	41.0	29.7	26.4	65.17454	6-7

JULY 31, 1964 13 HR 20 MIN 49 SEC 590 MS

TAB NO 42 ATLAS PHOTO NO 42 POD SEQUENCE NO 623

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ

299.204 670.41425 -7.169 -27.967 2405.870 2.294 -69.075 115.991

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.924	-19.960	739.38459	-54.5	9.4	-82.7	34.3	15.39777	0.822	-91.4	68.2	40.8	29.7	26.7	0.	0-1
2	-12.089	-18.669	765.93507	-56.6	10.3	-82.4	33.4	15.38309	0.824	-90.4	69.6	38.6	34.5	29.8	52.07902	1-2
3	-11.089	-20.015	739.76836	-58.2	8.9	-81.3	32.8	14.83224	0.870	-87.6	68.2	41.0	29.7	26.5	50.11921	2-3
4	-10.994	-17.673	773.92361	-63.5	10.4	-81.5	30.5	15.51364	0.812	-87.4	70.4	36.4	35.8	33.4	69.67185	3-4
5	-13.173	-17.170	798.86858	-55.3	12.0	-83.9	34.1	16.01867	0.772	-93.4	71.1	36.4	39.5	33.0	67.81676	4-5
6	-13.174	-19.634	761.86704	-49.3	10.2	-83.2	36.4	15.27202	0.832	-93.1	68.7	41.0	33.9	25.9	72.68924	5-6
7	-11.084	-20.015	739.76836	-58.2	8.9	-81.3	32.8	14.83224	0.870	-87.6	68.2	41.0	29.7	26.5	64.16329	6-7

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JULY 31, 1964 13 HR 20 MIN 56 SEC 310 MS

TAB NO 43

ATLAS PHOTO NO 43

POD SEQUENCE NO 631

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				292.490		656.00110	-7.227	-27.848	2391.456	2.300	-68.992	115.973				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.914	-19.982	723.59165	-54.6	9.4	-82.8	34.2	15.07706	0.823	-91.4	68.2	40.9	29.6	26.7	0.	0-1
2	-12.062	-18.691	749.98308	-56.6	10.3	-82.4	33.4	15.06269	0.824	-90.4	69.5	38.6	34.5	29.8	51.73445	1-2
3	-11.083	-20.009	724.31322	-58.2	8.9	-81.3	32.8	14.52354	0.870	-87.6	68.2	41.0	29.8	26.5	49.06961	2-3
4	-10.990	-17.717	757.80604	-63.5	10.4	-81.5	30.5	15.19057	0.812	-87.4	70.4	36.4	35.8	33.4	68.21619	3-4
5	-13.128	-17.225	762.15193	-55.3	12.0	-83.9	34.0	15.68328	0.773	-93.4	71.1	36.4	39.5	32.9	66.38004	4-5
6	-13.125	-19.637	745.96993	-49.4	10.2	-83.2	36.3	14.95336	0.832	-93.1	68.7	41.0	33.8	25.9	71.15715	5-6
7	-11.083	-20.009	724.31322	-58.2	8.9	-81.3	32.8	14.52354	0.870	-87.6	68.2	41.0	29.8	26.5	62.81220	6-7

JULY 31, 1964 13 HR 21 MIN 1 SEC 350 MS

TAB NO 44

ATLAS PHOTO NO 44

POD SEQUENCE NO 637

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				287.450		645.17426	-7.271	-27.757	2380.630	2.304	-68.930	115.960				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.906	-19.998	711.72553	-54.6	9.4	-82.8	34.2	14.83554	0.823	-91.4	68.2	40.9	29.5	26.6	0.	0-1
2	-12.042	-18.710	737.96838	-56.6	10.3	-82.4	33.4	14.82139	0.824	-90.4	69.5	38.6	34.5	29.7	51.43513	1-2
3	-11.079	-20.007	712.72109	-58.3	8.9	-81.3	32.8	14.29110	0.870	-87.6	68.2	41.0	29.8	26.5	48.27778	2-3
4	-10.987	-17.751	745.66341	-63.4	10.4	-81.5	30.5	14.94717	0.813	-87.4	70.4	36.4	35.8	33.4	67.11668	3-4
5	-13.091	-17.268	769.57512	-55.3	11.9	-83.8	34.0	15.43110	0.774	-93.4	71.0	36.4	39.4	32.9	65.29848	4-5
6	-13.087	-19.641	734.00163	-49.4	10.2	-83.2	36.3	14.71346	0.832	-93.1	68.7	41.0	33.8	25.9	70.00016	5-6
7	-11.079	-20.007	712.72109	-58.3	8.9	-81.3	32.8	14.29110	0.870	-87.6	68.2	41.0	29.8	26.5	61.79556	6-7

JULY 31, 1964 13 HR 21 MIN 9 SEC 749 MS

TAB NO 45

ATLAS PHOTO NO 45

POD SEQUENCE NO 647

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				279.050		627.09744	-7.345	-27.604	2362.553	2.311	-68.824	115.937				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.893	-20.025	691.90846	-54.7	9.4	-82.8	34.2	14.43125	0.823	-91.4	68.1	41.0	29.5	26.5	0.	0-1
2	-12.009	-18.744	717.85605	-56.7	10.3	-82.4	33.3	14.41745	0.825	-90.4	69.5	38.6	34.5	29.7	50.86642	1-2
3	-11.072	-20.005	693.31989	-58.3	8.9	-81.3	32.8	13.90208	0.870	-87.6	68.2	41.0	29.8	26.5	46.95049	2-3
4	-10.983	-17.811	725.33110	-63.4	10.4	-81.5	30.5	14.53962	0.813	-87.3	70.3	36.4	35.7	33.3	65.27142	3-4
5	-13.029	-17.343	748.51965	-55.4	11.9	-83.8	33.9	15.00890	0.775	-93.4	71.0	36.4	39.3	32.8	63.48912	4-5
6	-13.026	-19.650	713.97387	-49.5	10.1	-83.3	36.2	14.31200	0.833	-93.1	68.7	41.0	33.8	25.9	68.05900	5-6
7	-11.072	-20.005	693.31989	-58.3	8.9	-81.3	32.8	13.90208	0.870	-87.6	68.2	41.0	29.8	26.5	60.09523	6-7

JULY 31, 1964 13 HR 21 MIN 16 SEC 469 MS

TAB NO 46

ATLAS PHOTO NO 46

POD SEQUENCE NO 655

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				272.331		612.60648	-7.405	-27.480	2348.062	2.316	-68.739	115.919				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.883	-20.047	676.01764	-54.7	9.4	-82.8	34.1	14.10651	0.824	-91.4	68.1	41.0	29.4	26.5	0.	0-1
2	-11.982	-18.772	701.72111	-56.7	10.3	-82.4	33.3	14.09340	0.825	-90.4	69.5	38.6	34.4	29.7	50.33621	1-2
3	-11.067	-20.004	677.75399	-58.3	8.9	-81.3	32.7	13.58956	0.870	-87.6	68.2	41.0	29.8	26.5	45.88635	2-3
4	-10.980	-17.860	709.02075	-63.4	10.3	-81.4	30.5	14.21268	0.814	-87.3	70.3	36.4	35.7	33.3	63.79233	3-4
5	-12.979	-17.404	731.63224	-55.4	11.8	-83.8	33.9	13.67028	0.776	-93.4	70.9	36.4	39.3	32.8	62.03893	4-5
6	-12.976	-19.657	697.90721	-49.6	10.1	-83.3	36.1	13.98955	0.833	-93.1	68.7	41.0	33.7	25.9	66.50379	5-6
7	-11.067	-20.004	677.75399	-58.3	8.9	-81.3	32.7	13.58956	0.870	-87.6	68.2	41.0	29.8	26.5	58.73179	6-7

JULY 31, 1964 13 HR 21 MIN 23 SEC 188 MS

TAB NO 47

ATLAS PHOTO NO 47

POD SEQUENCE NO 663

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
				265.611		598.08893	-7.465	-27.354	2333.544	2.322	-68.653	115.900				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.873	-20.068	660.09348	-54.7	9.4	-82.8	34.1	13.78183	0.824	-91.3	68.1	41.1	29.3	26.4	0.	0-1
2	-11.955	-18.800	685.54961	-56.7	10.2	-82.4	33.3	13.76861	0.825	-90.4	69.4	38.6	34.4	29.7	49.91809	1-2
3	-11.061	-20.003	662.15087	-58.3	8.9	-81.3	32.7	13.27709	0.870	-87.6	68.2	41.0	29.8	26.5	44.82090	2-3
4	-10.976	-17.909	692.67480	-63.4	10.3	-81.4	30.6	13.88503	0.814	-87.3	70.2	36.4	35.6	33.2	62.31149	3-4
5	-12.928	-17.465	716.71099	-55.4	11.8	-83.8	33.8	14.33059	0.776	-93.4	70.6	36.4	39.2	32.7	60.58693	4-5
6	-12.926	-19.665	681.80405	-49.7	10.1	-83.3	36.0	13.66716	0.833	-93.1	68.7	41.0	33.7	25.9	64.94756	5-6
7	-11.061	-20.003	662.15087	-58.3	8.9	-81.3	32.7	13.27709	0.870	-87.6	68.2	41.0	29.8	26.5	57.36580	6-7

JULY 31, 1964 13 HR 21 MIN 28 SEC 228 MS

TAB NO 48

ATLAS PHOTO NO 48

POD SEQUENCE NO 669

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LUN	R	V	PTH	AZ				
				260.571		567.18253	-7.511	-27.259	2322.639	2.326	-68.587	115.886				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.866	-20.083	648.12865	-54.8	9.4	-82.8	34.0	13.53738	0.824	-91.3	68.1	41.1	29.2	26.4	0.	0-1
2	-11.935	-18.821	673.38931	-56.7	10.2	-82.4	33.3	12.52438	0.825	-90.4	69.4	38.6	34.4	29.7	49.54217	1-2
3	-11.057	-20.002	650.41783	-58.4	8.9	-81.3	32.7	12.04183	0.870	-87.6	68.2	41.0	29.8	26.5	44.01963	2-3
4	-10.973	-17.946	680.38336	-63.4	10.3	-81.4	30.6	13.63865	0.814	-87.3	70.2	36.4	35.6	33.2	61.19807	3-4
5	-12.891	-17.510	701.98843	-55.5	11.8	-83.8	33.8	14.07598	0.777	-93.4	70.8	36.4	39.1	32.7	59.49575	4-5
6	-12.888	-19.670	669.69590	-49.7	10.0	-83.3	35.9	13.42445	0.833	-93.1	68.7	41.0	33.7	25.9	63.77780	5-6
7	-11.057	-20.002	650.41783	-58.4	8.9	-81.3	32.7	12.04183	0.870	-87.6	68.2	41.0	29.8	26.5	56.33890	6-7

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TAB NO 49															ATLAS PHOTO NO 49					POD SEQUENCE NO 679									
JULY 31, 1964 13 HR 21 MIN 36 SEC 627 MS																													
TRAJECTORY DATA					SEC TO IMPACT					ALT		LAT		LCN		R		V		PTH		AZ							
					252.172					568.97397		-7.588		-27.098		2304.429		2.333		-68.477		115.861							
PHOTO DATA																													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-10.854	-20.109	628.14465	-54.8	9.4	-82.8	34.0	13.12809	0.825	-91.3	68.1	41.2	29.2	26.3	0.	0-1													
2	-11.901	-18.859	653.02854	-56.8	10.2	-82.4	33.2	13.11546	0.826	-90.3	69.4	38.6	34.3	29.6	48.83224	1-2													
3	-11.049	-20.004	630.77666	-58.4	8.9	-81.3	32.7	12.64799	0.870	-87.6	68.2	41.0	29.8	26.5	42.67623	2-3													
4	-10.968	-18.010	659.79973	-63.4	10.3	-81.4	30.6	13.22605	0.815	-87.3	70.1	36.4	35.5	33.1	59.33016	3-4													
5	-12.827	-17.590	680.68362	-55.5	11.7	-83.8	33.8	13.64849	0.778	-93.4	70.7	36.4	39.0	32.6	57.66860	4-5													
6	-12.825	-19.683	649.42709	-49.8	10.0	-83.3	35.8	13.01817	0.834	-93.1	68.7	41.0	33.6	25.9	61.81563	5-6													
7	-11.049	-20.004	630.77666	-58.4	8.9	-81.3	32.7	12.64799	0.870	-87.6	68.2	41.0	29.8	26.5	54.62036	6-7													
TAB NO 50															ATLAS PHOTO NO 50					POD SEQUENCE NO 687									
JULY 31, 1964 13 HR 21 MIN 43 SEC 347 MS																													
TRAJECTORY DATA					SEC TO IMPACT					ALT		LAT		LCN		R		V		PTH		AZ							
					245.452					554.37592		-7.651		-26.967		2289.831		2.339		-68.387		115.842							
PHOTO DATA																													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-10.844	-20.130	612.11922	-54.9	9.4	-82.8	33.9	12.79952	0.825	-91.3	68.0	41.2	29.1	26.2	0.	0-1													
2	-11.873	-18.890	634.68378	-56.8	10.2	-82.4	33.2	12.78719	0.826	-90.3	69.3	38.6	34.3	29.6	48.23223	1-2													
3	-11.043	-20.006	615.00920	-58.4	8.9	-81.3	32.7	12.33183	0.870	-87.6	68.2	41.0	29.8	26.5	41.59790	2-3													
4	-10.963	-18.063	643.27618	-63.4	10.3	-81.4	30.6	12.89484	0.815	-87.3	70.1	36.4	35.5	33.1	57.83092	3-4													
5	-12.775	-17.655	663.58382	-55.5	11.7	-83.8	33.7	13.30581	0.779	-93.4	70.6	36.4	39.0	32.5	56.20304	4-5													
6	-12.774	-19.694	633.15742	-49.9	10.0	-83.3	35.8	12.69204	0.834	-93.1	68.7	41.0	33.6	25.9	60.24146	5-6													
7	-11.043	-20.006	615.00920	-58.4	8.9	-81.3	32.7	12.33183	0.870	-87.6	68.2	41.0	29.8	26.5	53.24121	6-7													
TAB NO 51															ATLAS PHOTO NO 51					POD SEQUENCE NO 695									
JULY 31, 1964 13 HR 21 MIN 50 SEC 67 MS																													
TRAJECTORY DATA					SEC TO IMPACT					ALT		LAT		LCN		R		V		PTH		AZ							
					238.733					539.75049		-7.715		-26.835		2275.206		2.345		-68.297		115.821							
PHOTO DATA																													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-10.835	-20.150	596.05939	-54.9	9.3	-82.8	33.9	12.47004	0.826	-91.3	68.0	41.3	29.0	26.2	0.	0-1													
2	-11.846	-18.923	620.29212	-56.8	10.2	-82.4	33.2	12.45798	0.827	-90.3	69.3	38.6	34.2	29.6	47.62052	1-2													
3	-11.038	-20.010	599.19450	-58.4	8.9	-81.3	32.7	12.01472	0.870	-87.6	68.2	41.0	29.7	26.5	40.51744	2-3													
4	-10.960	-18.117	626.70004	-63.3	10.3	-81.4	30.7	12.56257	0.816	-87.3	70.0	36.4	35.4	33.0	56.32564	3-4													
5	-12.725	-17.720	646.43946	-55.6	11.6	-83.8	33.7	12.96205	0.780	-93.4	70.6	36.4	38.9	32.5	54.73676	4-5													
6	-12.724	-19.706	616.84737	-50.0	10.0	-83.3	35.7	12.36511	0.835	-93.1	68.6	41.0	33.6	25.9	58.66229	5-6													
7	-11.038	-20.010	599.19450	-58.4	8.9	-81.3	32.7	12.01472	0.870	-87.6	68.2	41.0	29.7	26.5	51.86113	6-7													
TAB NO 52															ATLAS PHOTO NO 52					POD SEQUENCE NO 701									
JULY 31, 1964 13 HR 21 MIN 55 SEC 106 MS																													
TRAJECTORY DATA					SEC TO IMPACT					ALT		LAT		LCN		R		V		PTH		AZ							
					233.693					528.76352		-7.763		-26.734		2264.219		2.349		-68.228		115.806							
PHOTO DATA																													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-10.828	-20.165	583.99195	-54.9	9.3	-82.8	33.9	12.22228	0.826	-91.3	68.0	41.3	28.9	26.1	0.	0-1													
2	-11.826	-18.948	607.36610	-56.8	10.2	-82.4	33.2	12.21042	0.827	-90.3	69.3	38.6	34.2	29.5	47.14389	1-2													
3	-11.034	-20.013	587.30193	-58.4	8.9	-81.3	32.7	11.77626	0.870	-87.6	68.2	41.0	29.7	26.5	39.70527	2-3													
4	-10.958	-18.158	614.23547	-63.3	10.3	-81.4	30.7	12.31272	0.816	-87.3	70.0	36.4	35.4	33.0	55.19396	3-4													
5	-12.687	-17.770	633.54935	-55.6	11.6	-83.8	33.7	12.70358	0.780	-93.4	70.5	36.4	38.8	32.4	53.63494	4-5													
6	-12.686	-19.715	604.58340	-50.0	9.9	-83.4	35.7	12.11927	0.835	-93.1	68.6	41.0	33.5	25.8	57.47553	5-6													
7	-11.034	-20.013	587.30193	-58.4	8.9	-81.3	32.7	11.77626	0.870	-87.6	68.2	41.0	29.7	26.5	50.82391	6-7													
TAB NO 53															ATLAS PHOTO NO 53					POD SEQUENCE NO 713									
JULY 31, 1964 13 HR 22 MIN 5 SEC 186 MS																													
TRAJECTORY DATA					SEC TO IMPACT					ALT		LAT		LCN		R		V		PTH		AZ							
					223.614					506.74179		-7.861		-26.530		2242.197		2.358		-68.089		115.775							
PHOTO DATA																													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-10.814	-20.195	559.79694	-54.9	9.3	-82.8	33.9	11.72441	0.827	-91.3	68.0	41.4	28.8	26.0	0.	0-1													
2	-11.786	-19.001	583.19689	-56.8	10.1	-82.4	33.2	11.71255	0.828	-90.3	69.2	38.6	34.1	29.5	46.09083	1-2													
3	-11.026	-20.022	563.40707	-58.4	8.9	-81.3	32.7	11.29713	0.870	-87.6	68.2	41.0	29.7	26.5	38.07149	2-3													
4	-10.952	-18.244	589.18591	-63.3	10.3	-81.3	30.8	11.81060	0.817	-87.3	69.9	36.4	35.3	32.9	52.91745	3-4													
5	-12.611	-17.873	607.64597	-55.6	11.5	-83.8	33.7	12.18418	0.782	-93.4	70.4	36.4	38.7	32.3	51.42111	4-5													
6	-12.610	-19.737	579.94269	-50.1	9.9	-83.4	35.6	11.62535	0.836	-93.1	68.6	41.0	33.5	25.8	55.08870	5-6													
7	-11.026	-20.022	563.40707	-58.4	8.9	-81.3	32.7	11.29713	0.870	-87.6	68.2	41.0	29.7	26.5	48.73982	6-7													
TAB NO 54															ATLAS PHOTO NO 54					POD SEQUENCE NO 721									
JULY 31, 1964 13 HR 22 MIN 11 SEC 905 MS																													
TRAJECTORY DATA					SEC TO IMPACT					ALT		LAT		LCN		R		V		PTH		AZ							
					216.894					492.02563		-7.927		-26.392		2227.481		2.364		-67.995		115.753							
PHOTO DATA																													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT													
1	-10.805	-20.214	543.62288	-55.0	9.3	-82.8	33.8	11.39101	0.827	-91.3	68.0	41.4	28.7	25.9	0.	0-1													
2	-11.758	-19.037	566.51037	-56.8	10.1	-82.4	33.2	11.37983	0.828	-90.3	69.2	38.6	34.1	29.4	45.32440	1-2													
3	-11.020	-20.029	547.40661	-58.4	8.9	-81.3	32.7	11.07630	0.870	-87.6	68.2	41.0	29.7	26.5	36.97711	2-3													
4	-10.948	-18.302	572.41164	-63.2	10.3	-81.3	30.8	11.47436	0.818	-87.3	69.8	36.4	35.3	32.8	51.39279	3-4													
5	-12.559	-17.943	590.30196	-55.6	11.5	-83.8	33.7	11.83641	0.783	-93.4	70.3	36.4	38.6	32.2	49.93958	4-5													
6	-12.559	-19.753	563.44382	-50.1	9.9	-83.4	35.5	11.29463	0.836	-93.1	68.6	41.0	33.4	25.8	53.49077	5-6													
7	-11.020	-20.029	547.40661	-58.4	8.9	-81.3	32.7	11.07630	0.870	-87.6	68.2	41.0	29.7	26.5	47.34463	6-7													

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JULY 31, 1964 13 HR 22 MIN 16 SEC 945 MS TAB NO 55 ATLAS PHOTO NO 55 POD SEQUENCE NO 727

TRAJECTORY DATA			SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
			211.854		480.96954		-7.977		-26.287		2216.425		2.369		-67.924		115.737	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-10.798	-20.228	531.46844	-55.0	9.3	-82.8	33.8	11.14035	0.827	-91.3	67.9	41.5	28.7	25.9	0.	0-1		
2	-11.737	-19.065	554.14074	-56.8	10.1	-82.4	33.2	11.12939	0.829	-90.3	69.2	38.6	34.0	29.4	44.75374	1-2		
3	-11.015	-20.034	535.37646	-58.4	8.9	-81.3	32.7	10.73508	0.870	-87.6	68.1	41.0	29.7	26.5	36.15496	2-3		
4	-10.945	-18.346	559.80193	-63.2	10.3	-81.3	30.9	11.22160	0.818	-87.3	69.8	36.4	35.2	32.8	50.24763	3-4		
5	-12.520	-17.996	577.26559	-55.6	11.5	-83.4	33.6	11.57501	0.784	-93.4	70.3	36.4	38.5	32.7	48.82662	4-5		
6	-12.520	-19.765	551.03997	-50.2	9.9	-83.4	35.5	11.04599	0.836	-93.0	68.6	41.0	33.4	25.8	52.29101	5-6		
7	-11.015	-20.034	535.37646	-58.4	8.9	-81.3	32.7	10.73508	0.870	-87.6	68.1	41.0	29.7	26.5	46.29612	6-7		

JULY 31, 1964 13 HR 22 MIN 23 SEC 665 MS TAB NO 56 ATLAS PHOTO NO 56 POD SEQUENCE NO 735

TRAJECTORY DATA			SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
			205.135		466.20306		-8.044		-26.145		2201.658		2.375		-67.828		115.714	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-10.789	-20.247	515.23098	-55.0	9.3	-82.8	33.8	10.80531	0.828	-91.3	67.9	41.5	28.6	25.8	0.	0-1		
2	-11.708	-19.102	537.47293	-56.8	10.1	-82.4	33.2	10.79463	0.829	-90.3	69.1	38.6	34.0	29.4	43.95808	1-2		
3	-11.008	-20.042	519.29488	-58.4	8.9	-81.3	32.7	10.41262	0.870	-87.6	68.1	41.0	29.7	26.5	35.05666	2-3		
4	-10.941	-18.405	542.94797	-63.2	10.3	-81.3	30.9	10.88376	0.819	-87.3	69.7	36.4	35.2	32.7	48.71806	3-4		
5	-12.468	-18.067	559.84360	-55.6	11.4	-83.7	33.6	11.22567	0.785	-93.4	70.2	36.4	38.4	32.1	47.33982	4-5		
6	-12.468	-19.781	534.40012	-50.2	9.8	-83.4	35.4	10.71365	0.837	-93.0	68.5	41.0	33.3	25.8	50.68914	5-6		
7	-11.008	-20.042	519.29488	-58.4	8.9	-81.3	32.7	10.41262	0.870	-87.6	68.1	41.0	29.7	26.5	44.89496	6-7		

JULY 31, 1964 13 HR 22 MIN 27 SEC 24 MS TAB NO 57 ATLAS PHOTO NO 57 POD SEQUENCE NO 739

TRAJECTORY DATA			SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
			201.775		458.80905		-8.079		-26.074		2194.264		2.378		-67.779		115.703	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-10.785	-20.256	507.09865	-55.0	9.3	-82.8	33.8	10.63739	0.828	-91.3	67.9	41.5	28.6	25.8	0.	0-1		
2	-11.694	-19.121	529.11984	-56.9	10.1	-82.4	33.1	10.62667	0.829	-90.3	69.1	38.6	34.0	29.3	43.54897	1-2		
3	-11.005	-20.046	511.23521	-58.4	8.9	-81.3	32.7	10.25101	0.870	-87.6	68.1	41.0	29.7	26.4	34.50647	2-3		
4	-10.938	-18.435	534.50195	-63.1	10.2	-81.3	30.9	10.71446	0.819	-87.3	69.7	36.4	35.1	32.7	47.95191	3-4		
5	-12.442	-18.102	551.11379	-55.6	11.4	-83.7	33.6	11.05063	0.785	-93.4	70.2	36.4	38.4	32.1	46.59514	4-5		
6	-12.442	-19.789	526.15128	-50.3	9.8	-83.4	35.4	10.54710	0.837	-93.0	68.5	41.0	33.3	25.8	49.88699	5-6		
7	-11.005	-20.046	511.23521	-58.4	8.9	-81.3	32.7	10.25101	0.870	-87.6	68.1	41.0	29.7	26.4	44.19300	6-7		

JULY 31, 1964 13 HR 22 MIN 32 SEC 64 MS TAB NO 58 ATLAS PHOTO NO 58 POD SEQUENCE NO 745

TRAJECTORY DATA			SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
			196.735		447.70450		-8.130		-25.966		2183.160		2.383		-67.706		115.686	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-10.778	-20.270	494.88311	-55.0	9.3	-82.8	33.8	10.38492	0.828	-91.3	67.9	41.6	28.5	25.7	0.	0-1		
2	-11.672	-19.150	516.55975	-56.9	10.1	-82.4	33.1	10.37461	0.830	-90.3	69.1	38.6	33.9	29.3	42.91109	1-2		
3	-11.000	-20.053	499.11663	-58.4	8.9	-81.3	32.7	10.00802	0.870	-87.6	68.1	41.0	29.7	26.4	33.67896	2-3		
4	-10.934	-18.480	521.80185	-63.1	10.2	-81.3	31.0	10.45969	0.820	-87.3	69.7	36.4	35.1	32.7	46.79956	3-4		
5	-12.402	-18.157	537.98784	-55.6	11.4	-83.7	33.6	10.78744	0.786	-93.4	70.1	36.4	38.3	32.0	45.47573	4-5		
6	-12.403	-19.802	513.65851	-50.3	9.8	-83.4	35.3	10.29668	0.837	-93.0	68.5	41.0	33.3	25.7	48.68079	5-6		
7	-11.000	-20.053	499.11663	-58.4	8.9	-81.3	32.7	10.00802	0.870	-87.6	68.1	41.0	29.7	26.4	43.13765	6-7		

JULY 31, 1964 13 HR 22 MIN 37 SEC 104 MS TAB NO 59 ATLAS PHOTO NO 59 POD SEQUENCE NO 751

TRAJECTORY DATA			SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
			191.696		436.58301		-8.182		-25.856		2172.038		2.388		-67.632		115.669	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-10.772	-20.284	482.64626	-55.0	9.3	-82.8	33.8	10.13177	0.829	-91.3	67.9	41.6	28.4	25.7	0.	0-1		
2	-11.651	-19.179	503.96662	-56.9	10.0	-82.4	33.1	10.12169	0.830	-90.3	69.0	38.7	33.9	29.3	42.25082	1-2		
3	-10.994	-20.060	486.96603	-58.4	8.9	-81.3	32.7	9.76438	0.870	-87.6	68.1	41.0	29.7	26.4	32.84938	2-3		
4	-10.931	-18.526	509.06861	-63.1	10.2	-81.3	31.0	10.20465	0.820	-87.3	69.6	36.4	35.0	32.6	45.64442	3-4		
5	-12.362	-18.211	524.82880	-55.7	11.3	-83.7	33.6	10.52358	0.787	-93.4	70.1	36.4	38.3	31.9	44.35385	4-5		
6	-12.363	-19.816	501.13346	-50.3	9.8	-83.4	35.3	10.04561	0.838	-93.0	68.5	41.0	33.2	25.7	47.47194	5-6		
7	-10.994	-20.060	486.96603	-58.4	8.9	-81.3	32.7	9.76438	0.870	-87.6	68.1	41.0	29.7	26.4	42.07990	6-7		

JULY 31, 1964 13 HR 22 MIN 42 SEC 144 MS TAB NO 60 ATLAS PHOTO NO 60 POD SEQUENCE NO 757

TRAJECTORY DATA			SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
			186.656		425.44528		-8.235		-25.745		2160.901		2.393		-67.557		115.651	
PHOTO DATA																		
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
1	-10.766	-20.297	470.38889	-55.0	9.3	-82.8	33.7	9.87804	0.829	-91.3	67.9	41.7	28.4	25.6	0.	0-1		
2	-11.629	-19.209	491.34471	-56.9	10.0	-82.4	33.1	9.86819	0.830	-90.3	69.0	38.7	33.9	29.2	41.57332	1-2		
3	-10.989	-20.067	474.78695	-58.4	8.9	-81.3	32.7	9.52017	0.871	-87.6	68.1	41.0	29.6	26.4	32.01822	2-3		
4	-10.927	-18.572	496.30666	-63.1	10.2	-81.3	31.0	9.94884	0.821	-87.3	69.6	36.4	35.0	32.5	44.48732	3-4		
5	-12.322	-18.266	511.64175	-55.7	11.3	-83.7	33.6	10.25916	0.787	-93.4	70.0	36.4	38.2	31.9	43.22996	4-5		
6	-12.323	-19.830	488.57992	-50.4	9.8	-83.4	35.2	9.79397	0.838	-93.0	68.5	41.0	33.2	25.7	46.26142	5-6		
7	-10.989	-20.067	474.78695	-58.4	8.9	-81.3	32.7	9.52017	0.871	-87.6	68.1	41.0	29.6	26.4	41.01991	6-7		

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JULY 31, 1964 13 HR 22 MIN 47 SEC 183 MS TAB NO 61 ATLAS PHOTO NO 61 POD SEQUENCE NO 763

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ			
				181.616		414.29059		-8.288		-25.634		2149.746		2.398		-67.481		115.633			
PHOTO DATA				AZS/C		AZN		AZSUN		AZA		A*		B/A		AZPHAZ		INCD PHAZ EMIS ALPHA		SCALE PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.760	-20.310	458.11010	-55.1	9.3	-82.8	33.7	9.62423	0.830	-91.3	67.9	41.7	28.3	25.6	0.	0-1					
2	-11.606	-19.237	478.71902	-56.9	10.0	-82.4	33.1	9.61461	0.831	-90.3	69.0	38.7	33.8	29.2	40.91911	1-2					
3	-10.983	-20.073	462.60012	-58.4	8.9	-81.3	32.7	9.27581	0.871	-87.6	68.1	41.0	29.6	26.4	31.18885	2-3					
4	-10.922	-18.617	483.54475	-63.0	10.2	-81.2	31.1	9.69302	0.821	-87.3	69.5	36.4	34.9	32.5	43.33350	3-4					
5	-12.281	-18.320	498.45694	-55.7	11.3	-83.7	33.6	9.99478	0.788	-93.3	69.9	36.4	38.1	31.8	42.10716	4-5					
6	-12.283	-19.842	476.02006	-50.4	9.7	-83.4	35.2	9.54221	0.838	-93.0	68.5	41.0	33.2	25.7	45.05501	5-6					
7	-10.983	-20.073	462.60012	-58.4	8.9	-81.3	32.7	9.27581	0.871	-87.6	68.1	41.0	29.6	26.4	39.95976	6-7					

JULY 31, 1964 13 HR 22 MIN 53 SEC 903 MS TAB NO 62 ATLAS PHOTO NO 62 POD SEQUENCE NO 771

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ			
				174.897		399.39142		-8.360		-25.483		2134.847		2.404		-67.380		115.609			
PHOTO DATA				AZS/C		AZN		AZSUN		AZA		A*		B/A		AZPHAZ		INCD PHAZ EMIS ALPHA		SCALE PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.751	-20.328	441.70526	-55.1	9.3	-82.8	33.7	9.28516	0.830	-91.3	67.8	41.8	28.2	25.5	0.	0-1					
2	-11.576	-19.214	461.09247	-56.9	10.0	-82.4	33.1	9.27587	0.831	-90.3	68.9	38.7	33.8	29.2	40.04143	1-2					
3	-10.975	-20.081	446.31691	-58.4	8.9	-81.3	32.7	8.96931	0.871	-87.6	68.1	41.0	29.6	26.4	30.08236	2-3					
4	-10.916	-18.676	466.49837	-63.0	10.2	-81.2	31.1	9.35132	0.822	-87.3	69.5	36.4	34.9	32.4	41.79469	3-4					
5	-12.227	-18.390	480.84676	-55.7	11.2	-83.7	33.5	9.64171	0.789	-93.3	69.9	36.4	38.0	31.8	40.60863	4-5					
6	-12.229	-19.858	459.24030	-50.5	9.7	-83.5	35.1	9.20585	0.839	-93.0	68.4	41.0	33.1	25.7	43.44679	5-6					
7	-10.975	-20.081	446.31691	-58.4	8.9	-81.3	32.7	8.96931	0.871	-87.6	68.1	41.0	29.6	26.4	38.54423	6-7					

JULY 31, 1964 13 HR 22 MIN 57 SEC 263 MS TAB NO 63 ATLAS PHOTO NO 63 POD SEQUENCE NO 775

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ			
				171.537		391.93051		-8.396		-25.406		2127.386		2.408		-67.328		115.597			
PHOTO DATA				AZS/C		AZN		AZSUN		AZA		A*		B/A		AZPHAZ		INCD PHAZ EMIS ALPHA		SCALE PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.747	-20.336	433.48861	-55.1	9.3	-82.8	33.7	9.11518	0.830	-91.3	67.8	41.8	28.2	25.5	0.	0-1					
2	-11.561	-19.293	453.39764	-56.9	10.0	-82.4	33.1	9.10606	0.831	-90.3	68.9	38.7	33.8	29.2	39.58823	1-2					
3	-10.971	-20.085	438.15424	-58.4	8.9	-81.3	32.7	8.78563	0.871	-87.5	68.1	41.0	29.6	26.4	29.52783	2-3					
4	-10.913	-18.706	457.49362	-63.0	10.2	-81.2	31.1	9.18004	0.822	-87.3	69.4	36.4	34.9	32.4	41.02354	3-4					
5	-12.200	-18.426	472.02331	-55.7	11.2	-83.7	33.5	9.46475	0.789	-93.3	69.8	36.4	38.0	31.7	39.85780	4-5					
6	-12.201	-19.866	450.82924	-50.5	9.7	-83.5	35.1	9.03725	0.839	-93.0	68.4	41.0	33.1	25.7	42.64112	5-6					
7	-10.971	-20.085	438.15424	-58.4	8.9	-81.3	32.7	8.78563	0.871	-87.5	68.1	41.0	29.6	26.4	37.83471	6-7					

JULY 31, 1964 13 HR 23 MIN 0 SEC 622 MS TAB NO 64 ATLAS PHOTO NO 64 POD SEQUENCE NO 779

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ			
				168.177		384.46222		-8.432		-25.330		2119.918		2.411		-67.277		115.584			
PHOTO DATA				AZS/C		AZN		AZSUN		AZA		A*		B/A		AZPHAZ		INCD PHAZ EMIS ALPHA		SCALE PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.743	-20.344	425.26250	-55.1	9.3	-82.8	33.7	8.94495	0.830	-91.3	67.8	41.8	28.2	25.4	0.	0-1					
2	-11.546	-19.312	444.92976	-56.9	10.0	-82.4	33.1	8.93599	0.832	-90.3	68.9	38.7	33.7	29.1	39.12736	1-2					
3	-10.967	-20.089	429.47863	-58.4	8.9	-81.3	32.7	8.62170	0.871	-87.5	68.1	41.0	29.6	26.4	28.97263	2-3					
4	-10.910	-18.737	444.39595	-63.0	10.2	-81.2	31.1	9.00850	0.822	-87.3	69.4	36.4	34.8	32.4	40.25152	3-4					
5	-12.173	-18.462	463.18516	-55.7	11.2	-83.7	33.5	9.28753	0.790	-93.3	69.8	36.4	38.0	31.7	39.10611	4-5					
6	-12.174	-19.875	442.40527	-50.6	9.7	-83.5	35.0	8.86838	0.839	-93.0	68.4	41.0	33.1	25.7	41.83466	5-6					
7	-10.967	-20.089	429.47863	-58.4	8.9	-81.3	32.7	8.62170	0.871	-87.5	68.1	41.0	29.6	26.4	37.12437	6-7					

JULY 31, 1964 13 HR 23 MIN 7 SEC 342 MS TAB NO 65 ATLAS PHOTO NO 65 POD SEQUENCE NO 787

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ			
				161.457		369.50217		-8.506		-25.174		2104.957		2.418		-67.172		115.559			
PHOTO DATA				AZS/C		AZN		AZSUN		AZA		A*		B/A		AZPHAZ		INCD PHAZ EMIS ALPHA		SCALE PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.736	-20.361	408.78084	-55.1	9.3	-82.8	33.6	8.60362	0.831	-91.3	67.8	41.9	28.1	25.4	0.	0-1					
2	-11.515	-19.351	427.95132	-56.9	10.0	-82.4	33.1	8.59499	0.832	-90.3	68.9	38.6	33.7	29.1	38.17864	1-2					
3	-10.958	-20.097	413.58541	-58.4	8.9	-81.3	32.7	8.29299	0.871	-87.5	68.1	41.0	29.6	26.4	27.85978	2-3					
4	-10.903	-18.797	432.23815	-63.0	10.2	-81.2	31.2	8.66456	0.823	-87.3	69.4	36.4	34.8	32.3	38.70430	3-4					
5	-12.117	-18.534	445.46684	-55.7	11.2	-83.7	33.5	8.93226	0.791	-93.3	69.7	36.4	37.9	31.6	37.59972	4-5					
6	-12.119	-19.892	425.51524	-50.6	9.7	-83.5	35.0	8.52982	0.840	-93.0	68.4	41.0	33.0	25.7	40.21890	5-6					
7	-10.958	-20.097	413.58541	-58.4	8.9	-81.3	32.7	8.29299	0.871	-87.5	68.1	41.0	29.6	26.4	35.70030	6-7					

JULY 31, 1964 13 HR 23 MIN 12 SEC 382 MS TAB NO 66 ATLAS PHOTO NO 66 POD SEQUENCE NO 793

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ			
				156.418		358.26205		-8.561		-25.056		2093.717		2.423		-67.093		115.540			
PHOTO DATA				AZS/C		AZN		AZSUN		AZA		A*		B/A		AZPHAZ		INCD PHAZ EMIS ALPHA		SCALE PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT					
1	-10.730	-20.373	396.39413	-55.2	9.3	-82.8	33.6	8.34683	0.831	-91.3	67.8	41.9	28.0	25.3	0.	0-1					
2	-11.491	-19.381	415.17863	-56.9	9.9	-82.4	33.1	8.33847	0.832	-90.3	68.8	38.6	33.7	29.1	37.44041	1-2					
3	-10.951	-20.105	401.25251	-58.4	8.9	-81.3	32.7	8.04570	0.871	-87.5	68.1	41.0	29.6	26.4	27.02290	2-3					
4	-10.898	-18.843	419.33093	-62.9	10.2	-81.2	31.2	8.40583	0.823	-87.3	69.3	36.4	34.7	32.3	37.54077	3-4					
5	-12.076	-18.588	432.13958	-55.8	11.1	-83.7	33.4	8.66502	0.791	-93.3	69.7	36.4	37.8	31.6	36.46721	4-5					
6	-12.078	-19.905	412.80957	-50.7	9.6	-83.5	34.9	8.27513	0.840	-93.0	68.4	41.0	33.0	25.7	39.00421	5-6					
7	-10.951	-20.105	401.25251	-58.4	8.9	-81.3	32.7	8.04570	0.871	-87.5	68.1	41.0	29.6	26.4	34.62938	6-7					

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JULY 31, 1964 13 HR 23 MIN 15 SEC 742 MS TAB NO 67 ATLAS PHOTO NO 67 POD SEQUENCE NO 797

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				153.058	350.75876	-8.599	-24.977	2086.214	2.427	-67.040	115.527				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.726	-20.381	388.12386	-55.2	9.3	-82.8	33.6	8.17531	0.831	-91.3	67.8	42.0	28.0	25.3	0
2	-11.476	-19.401	406.64661	-57.0	9.9	-82.4	33.0	8.16711	0.833	-90.3	68.8	38.6	33.6	29.1	36.94004
3	-10.947	-20.110	393.01356	-58.4	8.9	-81.3	32.7	7.88050	0.871	-87.5	68.1	41.0	29.6	26.4	26.46410
4	-10.895	-18.875	410.70847	-62.9	10.2	-81.2	31.2	8.23299	0.823	-87.3	69.3	36.4	34.7	32.3	36.76358
5	-12.048	-18.625	423.23861	-58.8	11.1	-83.7	33.4	8.48655	0.792	-93.3	69.6	36.4	37.8	31.5	35.71145
6	-12.050	-19.914	404.32331	-50.7	9.6	-83.5	34.9	8.10501	0.840	-93.0	68.4	41.0	33.0	25.7	38.19320
7	-10.947	-20.110	393.01356	-58.4	8.9	-81.3	32.7	7.88050	0.871	-87.5	68.1	41.0	29.6	26.4	33.91455

JULY 31, 1964 13 HR 23 MIN 20 SEC 761 MS TAB NO 68 ATLAS PHOTO NO 68 POD SEQUENCE NO 803

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				148.018	339.48956	-8.656	-24.857	2074.945	2.432	-66.959	115.507				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.721	-20.393	375.70038	-55.2	9.3	-82.8	33.6	7.91751	0.832	-91.3	67.8	42.0	27.9	25.2	0
2	-11.453	-19.431	393.82267	-57.0	9.9	-82.4	33.0	7.90955	0.833	-90.3	68.8	38.6	33.6	29.0	36.17457
3	-10.940	-20.117	380.62925	-58.4	8.9	-81.3	32.7	7.63217	0.871	-87.5	68.1	41.0	29.6	26.4	25.62485
4	-10.890	-18.922	397.74812	-62.9	10.2	-81.2	31.3	7.97320	0.824	-87.3	69.2	36.4	34.7	32.2	35.59555
5	-12.007	-18.680	409.86206	-55.8	11.1	-83.6	33.4	8.21833	0.793	-93.3	69.6	36.4	37.7	31.5	34.57646
6	-12.009	-19.929	391.56916	-50.7	9.6	-83.5	34.8	7.84935	0.840	-93.0	68.4	41.0	33.0	25.7	36.97475
7	-10.940	-20.117	380.62925	-58.4	8.9	-81.3	32.7	7.63217	0.871	-87.5	68.1	41.0	29.6	26.4	32.84099

JULY 31, 1964 13 HR 23 MIN 22 SEC 461 MS TAB NO 69 ATLAS PHOTO NO 69 POD SEQUENCE NO 805

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				146.338	335.72906	-8.675	-24.816	2071.184	2.434	-66.932	115.500				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.719	-20.397	371.55405	-55.2	9.3	-82.8	33.6	7.83141	0.832	-91.3	67.8	42.0	27.9	25.2	0
2	-11.445	-19.441	389.54012	-57.0	9.9	-82.4	33.0	7.82354	0.833	-90.3	68.8	38.6	33.6	29.0	35.91383
3	-10.938	-20.120	376.49346	-58.4	8.9	-81.3	32.7	7.54924	0.871	-87.5	68.1	41.0	29.6	26.4	25.34454
4	-10.888	-18.937	393.42016	-62.9	10.2	-81.2	31.3	7.88644	0.824	-87.3	69.2	36.4	34.7	32.2	35.20559
5	-11.993	-18.699	405.39539	-55.8	11.1	-83.6	33.4	8.12877	0.793	-93.3	69.6	36.4	37.7	31.5	34.19756
6	-11.995	-19.933	387.31000	-50.8	9.6	-83.5	34.8	7.76397	0.840	-93.0	68.4	41.0	33.0	25.6	36.56806
7	-10.938	-20.123	376.49346	-58.4	8.9	-81.3	32.7	7.54924	0.871	-87.5	68.1	41.0	29.6	26.4	32.48247

JULY 31, 1964 13 HR 23 MIN 24 SEC 141 MS TAB NO 70 ATLAS PHOTO NO 70 POD SEQUENCE NO 807

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				144.658	331.96664	-8.694	-24.776	2067.422	2.435	-66.905	115.493				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.717	-20.400	367.40534	-55.2	9.3	-82.8	33.6	7.74524	0.832	-91.3	67.8	42.0	27.9	25.2	0
2	-11.437	-19.451	365.25379	-57.0	9.9	-82.4	33.0	7.73745	0.833	-90.3	68.8	38.6	33.6	29.0	35.65032
3	-10.936	-20.123	372.35394	-58.4	8.9	-81.3	32.7	7.46624	0.871	-87.5	68.1	41.0	29.6	26.4	25.06410
4	-10.886	-18.953	389.08838	-62.9	10.2	-81.2	31.3	7.79961	0.824	-87.3	69.2	36.4	34.6	32.2	34.81533
5	-11.979	-18.718	400.92488	-55.8	11.1	-83.6	33.4	8.03913	0.793	-93.3	69.6	36.4	37.7	31.5	33.81827
6	-11.981	-19.938	383.04707	-50.8	9.6	-83.5	34.8	7.67852	0.841	-93.0	68.3	41.0	32.9	25.6	36.16104
7	-10.936	-20.123	372.35394	-58.4	8.9	-81.3	32.7	7.46624	0.871	-87.5	68.1	41.0	29.6	26.4	32.12356

JULY 31, 1964 13 HR 23 MIN 26 SEC 821 MS TAB NO 71 ATLAS PHOTO NO 71 POD SEQUENCE NO 809

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				142.978	328.20218	-8.713	-24.735	2063.657	2.437	-66.878	115.487				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.716	-20.404	363.25399	-55.2	9.3	-82.8	33.5	7.65899	0.832	-91.3	67.8	42.0	27.8	25.2	0
2	-11.429	-19.462	380.96344	-57.0	9.9	-82.4	33.0	7.65129	0.833	-90.3	68.8	38.6	33.6	29.0	35.38388
3	-10.934	-20.126	368.21050	-58.4	8.9	-81.3	32.7	7.38316	0.871	-87.5	68.1	41.0	29.6	26.4	24.78337
4	-10.885	-18.969	384.75264	-62.9	10.2	-81.1	31.3	7.71270	0.824	-87.3	69.2	36.4	34.6	32.2	34.42476
5	-11.965	-18.737	396.45041	-55.8	11.1	-83.6	33.4	7.94941	0.793	-93.3	69.5	36.4	37.6	31.4	33.43878
6	-11.967	-19.943	378.78020	-50.8	9.6	-83.5	34.8	7.59299	0.841	-93.0	68.3	41.0	32.9	25.6	35.75375
7	-10.934	-20.126	368.21050	-58.4	8.9	-81.3	32.7	7.38316	0.871	-87.5	68.1	41.0	29.6	26.4	31.76452

JULY 31, 1964 13 HR 23 MIN 27 SEC 501 MS TAB NO 72 ATLAS PHOTO NO 72 POD SEQUENCE NO 811

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				141.299	324.43579	-8.732	-24.694	2059.891	2.439	-66.851	115.480				
PHOTO DATA															
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.421	-19.472	376.66932	-57.0	9.9	-82.4	33.0	7.56504	0.833	-90.3	68.7	38.6	33.6	29.0	0
3	-10.931	-20.129	364.06338	-58.4	8.9	-81.3	32.7	7.30000	0.871	-87.5	68.1	41.0	29.6	26.4	24.50243
4	-10.883	-18.985	380.41311	-62.9	10.2	-81.1	31.3	7.62571	0.824	-87.3	69.2	36.4	34.6	32.2	34.03389
5	-11.951	-18.755	391.97219	-55.8	11.0	-83.6	33.4	7.85961	0.793	-93.3	69.5	36.4	37.6	31.4	33.05908
6	-11.953	-19.948	374.50961	-50.8	9.6	-83.5	34.8	7.50738	0.841	-93.0	68.3	41.0	32.9	25.6	35.34619
7	-10.931	-20.129	364.06338	-58.4	8.9	-81.3	32.7	7.30000	0.871	-87.5	68.1	41.0	29.6	26.4	31.40506

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JULY 31, 1964 13 HR 23 MIN 29 SEC 181 MS TAB NO 73 ATLAS PHOTO NO 73 POD SEQUENCE NO 813

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				139.619		320.66748	-8.752	-24.653	2056.123	2.441	-66.823	115.473		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.413	-19.483	372.37080	-57.0	9.9	-82.4	33.0	7.47871	0.833	-90.3	68.7	38.6	33.5	29.0
3	-10.929	-20.131	359.91206	-58.4	8.9	-81.2	32.7	7.21676	0.871	-87.5	68.1	41.0	29.6	26.4
4	-10.881	-19.001	376.06926	-62.9	10.2	-81.1	31.3	7.53863	0.824	-87.3	69.2	36.4	34.6	32.1
5	-11.937	-18.774	387.48951	-55.8	11.0	-83.6	33.4	7.76973	0.794	-93.3	69.5	36.4	37.6	31.4
6	-11.939	-19.953	370.23466	-50.8	9.6	-83.5	34.7	7.42169	0.841	-93.0	68.3	41.0	32.9	25.6
7	-10.929	-20.131	359.91206	-58.4	8.9	-81.2	32.7	7.21676	0.871	-87.5	68.1	41.0	29.6	26.4

JULY 31, 1964 13 HR 23 MIN 30 SEC 861 MS TAB NO 74 ATLAS PHOTO NO 74 POD SEQUENCE NO 815

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				137.934		316.89713	-8.771	-24.612	2052.352	2.443	-66.796	115.466		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.405	-19.493	368.06662	-57.0	9.9	-82.4	33.0	7.39227	0.834	-90.3	68.7	38.6	33.5	29.0
3	-10.927	-20.135	355.75546	-58.4	8.9	-81.2	32.7	7.13342	0.871	-87.5	68.1	41.0	29.6	26.4
4	-10.879	-19.018	371.71983	-62.8	10.2	-81.1	31.3	7.45145	0.825	-87.3	69.1	36.4	34.6	32.1
5	-11.923	-18.773	383.00075	-55.8	11.0	-83.6	33.4	7.67972	0.794	-93.3	69.5	36.4	37.6	31.4
6	-11.925	-19.958	365.95397	-50.8	9.6	-83.5	34.7	7.33588	0.841	-93.0	68.3	41.0	32.9	25.6
7	-10.927	-20.135	355.75546	-58.4	8.9	-81.2	32.7	7.13342	0.871	-87.5	68.1	41.0	29.6	26.4

JULY 31, 1964 13 HR 23 MIN 32 SEC 541 MS TAB NO 75 ATLAS PHOTO NO 75 POD SEQUENCE NO 817

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				136.259		313.12500	-8.790	-24.571	2048.580	2.444	-66.768	115.459		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.397	-19.504	363.75882	-57.0	9.9	-82.4	33.0	7.30575	0.834	-90.3	68.7	38.6	33.5	29.0
3	-10.924	-20.138	351.59531	-58.4	8.9	-81.2	32.7	7.05000	0.871	-87.5	68.0	41.0	29.6	26.4
4	-10.877	-19.034	367.36681	-62.8	10.2	-81.1	31.3	7.36419	0.825	-87.3	69.1	36.4	34.6	32.1
5	-11.908	-18.812	378.50846	-55.8	11.0	-83.6	33.4	7.58964	0.794	-93.3	69.4	36.4	37.5	31.4
6	-11.911	-19.964	361.66973	-50.8	9.6	-83.5	34.7	7.25000	0.841	-93.0	68.3	41.0	32.9	25.6
7	-10.924	-20.138	351.59531	-58.4	8.9	-81.2	32.7	7.05000	0.871	-87.5	68.0	41.0	29.6	26.4

JULY 31, 1964 13 HR 23 MIN 34 SEC 220 MS TAB NO 76 ATLAS PHOTO NO 76 POD SEQUENCE NO 819

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				134.579		309.35054	-8.810	-24.529	2044.806	2.446	-66.741	115.452		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.389	-19.515	359.44672	-57.0	9.9	-82.4	33.0	7.21914	0.834	-90.3	68.7	38.6	33.5	29.0
3	-10.922	-20.141	347.43096	-58.4	8.9	-81.2	32.7	6.96650	0.871	-87.5	68.0	41.0	29.6	26.4
4	-10.875	-19.050	363.00952	-62.8	10.2	-81.1	31.4	7.27685	0.825	-87.3	69.1	36.4	34.6	32.1
5	-11.894	-18.831	374.01189	-55.8	11.0	-83.6	33.4	7.49948	0.794	-93.3	69.4	36.4	37.5	31.3
6	-11.897	-19.969	357.38125	-50.9	9.6	-83.5	34.7	7.16404	0.841	-93.0	68.3	41.0	32.9	25.6
7	-10.922	-20.141	347.43096	-58.4	8.9	-81.2	32.7	6.96650	0.871	-87.5	68.0	41.0	29.6	26.4

JULY 31, 1964 13 HR 23 MIN 35 SEC 900 MS TAB NO 77 ATLAS PHOTO NO 77 POD SEQUENCE NO 821

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				132.899		305.57420	-8.829	-24.488	2041.029	2.448	-66.713	115.446		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.381	-19.526	355.13088	-57.0	9.9	-82.4	33.0	7.13246	0.834	-90.3	68.7	38.6	33.5	29.0
3	-10.919	-20.144	343.26292	-58.4	8.9	-81.2	32.7	6.88292	0.871	-87.5	68.0	41.0	29.6	26.4
4	-10.873	-19.067	358.64846	-62.8	10.2	-81.1	31.4	7.18943	0.825	-87.3	69.1	36.4	34.5	32.1
5	-11.880	-18.851	369.51162	-55.8	11.0	-83.6	33.4	7.40924	0.795	-93.3	69.4	36.4	37.5	31.3
6	-11.882	-19.974	353.08906	-50.9	9.6	-83.5	34.7	7.07800	0.841	-93.0	68.3	41.0	32.9	25.6
7	-10.919	-20.144	343.26292	-58.4	8.9	-81.2	32.7	6.88292	0.871	-87.5	68.0	41.0	29.6	26.4

JULY 31, 1964 13 HR 23 MIN 37 SEC 580 MS TAB NO 78 ATLAS PHOTO NO 78 POD SEQUENCE NO 823

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				131.219		301.79585	-8.849	-24.446	2037.251	2.450	-66.685	115.439		
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA							
2	-11.373	-19.536	350.81111	-57.0	9.9	-82.4	33.0	7.04571	0.834	-90.3	68.7	38.6	33.5	28.9
3	-10.917	-20.147	339.09103	-58.4	8.9	-81.2	32.7	6.79927	0.871	-87.5	68.0	41.0	29.6	26.4
4	-10.871	-19.083	354.28350	-62.8	10.2	-81.1	31.4	7.10193	0.825	-87.3	69.1	36.4	34.5	32.1
5	-11.866	-18.870	365.00745	-55.8	11.0	-83.6	33.4	7.31893	0.795	-93.3	69.4	36.4	37.5	31.3
6	-11.868	-19.980	348.79300	-50.9	9.6	-83.5	34.7	6.99168	0.841	-93.0	68.3	41.0	32.9	25.6
7	-10.917	-20.147	339.09103	-58.4	8.9	-81.2	32.7	6.79927	0.871	-87.5	68.0	41.0	29.6	26.4

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JULY 31, 1964 13 HR 23 MIN 39 SEC 260 MS TAB NO 79 ATLAS PHOTO NO 79 POD SEQUENCE NO 825

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LN	R	V	PTH	AZ		
				129.539	298.01553	-8.869	-24.404	2033.471	2.452	-66.657	115.431		
PHOTO DATA													
PT	LAT	LN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.365	-19.547	346.48745	-57.0	9.9	-82.4	33.0	6.95887	0.834	-90.3	68.7 38.6 33.5	28.9	0
3	-10.914	-20.151	334.91533	-58.4	8.9	-81.2	32.7	6.71554	0.871	-87.5	68.0 41.0 29.6	26.4	22.52739
4	-10.869	-19.100	349.91468	-62.8	10.2	-81.1	31.4	7.01435	0.825	-87.3	69.1 36.4 34.5	32.0	31.28767
5	-11.851	-18.889	360.49947	-55.8	11.0	-83.6	33.4	7.22854	0.795	-93.3	69.4 36.4 37.5	31.3	30.39027
6	-11.854	-19.985	344.49312	-50.9	9.5	-83.5	34.6	6.90569	0.841	-93.0	68.3 41.0 32.8	25.6	32.48328
7	-10.914	-20.151	334.91533	-58.4	8.9	-81.2	32.7	6.71554	0.871	-87.5	68.0 41.0 29.6	26.4	28.87870

JULY 31, 1964 13 HR 23 MIN 40 SEC 940 MS TAB NO 80 ATLAS PHOTO NO 80 POD SEQUENCE NO 827

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LN	R	V	PTH	AZ		
				127.859	294.23309	-8.889	-24.362	2029.688	2.453	-66.629	115.424		
PHOTO DATA													
PT	LAT	LN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.356	-19.558	342.15974	-57.0	9.9	-82.4	33.0	6.87195	0.834	-90.3	68.7 38.6 33.5	28.9	0
3	-10.912	-20.154	330.73563	-58.4	8.9	-81.2	32.7	6.63173	0.871	-87.5	68.0 41.0 29.6	26.4	22.24433
4	-10.867	-19.116	345.54181	-62.8	10.2	-81.1	31.4	6.92670	0.825	-87.3	69.0 36.4 34.5	32.0	30.83412
5	-11.837	-18.909	355.98745	-55.8	11.0	-83.6	33.4	7.13807	0.795	-93.3	69.3 36.4 37.4	31.3	30.00779
6	-11.839	-19.991	340.18924	-50.9	9.5	-83.5	34.6	6.81941	0.842	-93.0	68.3 41.0 32.8	25.6	32.07314
7	-10.912	-20.154	330.73563	-58.4	8.9	-81.2	32.7	6.63173	0.871	-87.5	68.0 41.0 29.6	26.4	28.51669

JULY 31, 1964 13 HR 23 MIN 42 SEC 620 MS TAB NO 81 ATLAS PHOTO NO 81 POD SEQUENCE NO 829

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LN	R	V	PTH	AZ		
				126.179	290.44888	-8.908	-24.319	2025.904	2.455	-66.601	115.417		
PHOTO DATA													
PT	LAT	LN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.348	-19.569	337.82833	-57.0	9.9	-82.4	33.0	6.78496	0.834	-90.3	68.6 38.6 33.5	28.9	0
3	-10.909	-20.157	326.55231	-58.4	8.9	-81.2	32.7	6.54785	0.871	-87.5	68.0 41.0 29.6	26.4	21.96101
4	-10.865	-19.133	341.16525	-62.8	10.2	-81.1	31.4	6.83897	0.826	-87.3	69.0 36.4 34.5	32.0	30.50029
5	-11.822	-18.928	351.47179	-55.8	11.0	-83.6	33.4	7.04752	0.796	-93.3	69.3 36.4 37.4	31.3	29.62511
6	-11.825	-19.996	335.88171	-50.9	9.5	-83.5	34.6	6.73307	0.842	-93.0	68.3 41.0 32.8	25.6	31.66273
7	-10.909	-20.157	326.55231	-58.4	8.9	-81.2	32.7	6.54785	0.871	-87.5	68.0 41.0 29.6	26.4	28.15417

JULY 31, 1964 13 HR 23 MIN 44 SEC 300 MS TAB NO 82 ATLAS PHOTO NO 82 POD SEQUENCE NO 831

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LN	R	V	PTH	AZ		
				124.500	286.66225	-8.928	-24.277	2022.118	2.457	-66.573	115.410		
PHOTO DATA													
PT	LAT	LN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.340	-19.580	333.49202	-57.0	9.9	-82.4	33.0	6.69767	0.834	-90.3	68.6 38.6 33.4	28.9	0
3	-10.906	-20.161	322.36422	-58.4	8.9	-81.2	32.7	6.46387	0.871	-87.5	68.0 41.0 29.6	26.4	21.67746
4	-10.863	-19.150	336.78365	-62.8	10.2	-81.1	31.4	6.75114	0.826	-87.3	69.0 36.4 34.5	32.0	30.10598
5	-11.808	-18.948	346.95118	-55.9	10.9	-83.6	33.3	6.95688	0.796	-93.3	69.3 36.4 37.4	31.2	29.24205
6	-11.811	-20.002	331.56246	-51.0	9.5	-83.5	34.6	6.64663	0.842	-93.0	68.3 41.0 32.8	25.6	31.25191
7	-10.906	-20.161	322.36422	-58.4	8.9	-81.2	32.7	6.46387	0.871	-87.5	68.0 41.0 29.6	26.4	27.79155

JULY 31, 1964 13 HR 23 MIN 45 SEC 980 MS TAB NO 83 ATLAS PHOTO NO 83 POD SEQUENCE NO 833

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LN	R	V	PTH	AZ		
				122.820	282.87370	-8.948	-24.234	2018.329	2.459	-66.544	115.403		
PHOTO DATA													
PT	LAT	LN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.332	-19.592	329.15078	-57.0	9.9	-82.4	33.0	6.61068	0.835	-90.3	68.6 38.6 33.4	28.9	0
3	-10.904	-20.165	318.17141	-58.4	8.9	-81.2	32.7	6.37980	0.871	-87.5	68.0 41.0 29.6	26.4	21.39353
4	-10.861	-19.167	332.39685	-62.8	10.2	-81.1	31.4	6.66320	0.826	-87.3	69.0 36.4 34.5	32.0	29.71109
5	-11.794	-18.967	342.42553	-55.9	10.9	-83.6	33.3	6.86613	0.796	-93.3	69.3 36.4 37.4	31.2	28.85863
6	-11.796	-20.008	327.25264	-51.0	9.5	-83.5	34.6	6.56009	0.842	-93.0	68.3 41.0 32.8	25.6	30.84050
7	-10.904	-20.165	318.17141	-58.4	8.9	-81.2	32.7	6.37980	0.871	-87.5	68.0 41.0 29.6	26.4	27.42844

JULY 31, 1964 13 HR 23 MIN 47 SEC 660 MS TAB NO 84 ATLAS PHOTO NO 84 POD SEQUENCE NO 835

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LN	R	V	PTH	AZ		
				121.140	279.08321	-8.968	-24.192	2014.538	2.461	-66.516	115.396		
PHOTO DATA													
PT	LAT	LN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-11.323	-19.603	324.80566	-57.0	9.9	-82.4	33.0	6.52341	0.835	-90.3	68.6 38.6 33.4	28.9	0
3	-10.901	-20.168	313.97478	-58.4	8.9	-81.2	32.7	6.29565	0.871	-87.5	68.0 41.0 29.6	26.3	21.10941
4	-10.859	-19.184	328.00619	-62.8	10.2	-81.1	31.4	6.57519	0.826	-87.3	69.0 36.4 34.4	32.0	29.31591
5	-11.779	-18.987	337.89608	-55.9	10.9	-83.6	33.3	6.77531	0.796	-93.3	69.3 36.4 37.3	31.2	28.47502
6	-11.782	-20.013	322.93196	-51.0	9.5	-83.5	34.6	6.47348	0.842	-93.0	68.3 41.0 32.8	25.6	30.42886
7	-10.901	-20.168	313.97478	-58.4	8.9	-81.2	32.7	6.29565	0.871	-87.5	68.0 41.0 29.6	26.3	27.06504

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JULY 31, 1964 13 HR 23 MIN 49 SEC 340 MS TAB NO 85 ATLAS PHOTO NO 85 POD SEQUENCE NO 837

TRAJECTORY DATA SEC TO IMPACT 119.460 ALT 275.29077 LAT -8.989 LON -24.149 R 2010.746 V 2.463 PTH -66.488 AZ 115.388

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.315	-19.615	320.45668	-57.0	9.9	-82.3	33.0	6.43607	0.835	-90.3	68.6	38.6	33.4	28.9	0.	1-2
3	-10.899	-20.172	309.77435	-58.4	8.9	-81.2	32.7	6.21143	0.871	-87.5	68.0	41.0	29.6	26.3	20.82503	2-3
4	-10.857	-19.201	323.61169	-62.7	10.2	-81.1	31.5	6.48710	0.826	-87.3	69.0	36.4	34.4	31.9	28.92044	3-4
5	-11.765	-19.007	333.36280	-55.9	10.9	-83.6	33.3	6.68441	0.797	-93.3	69.2	36.4	37.3	31.2	28.09112	4-5
6	-11.767	-20.019	318.60750	-51.0	9.5	-83.5	34.5	6.38679	0.842	-93.0	68.2	41.0	32.8	25.6	30.01695	5-6
7	-10.899	-20.172	309.77435	-58.4	8.9	-81.2	32.7	6.21143	0.871	-87.5	68.0	41.0	29.6	26.3	26.70141	6-7

JULY 31, 1964 13 HR 23 MIN 51 SEC 19 MS TAB NO 86 ATLAS PHOTO NO 86 POD SEQUENCE NO 839

TRAJECTORY DATA SEC TO IMPACT 117.780 ALT 271.49608 LAT -9.009 LON -24.106 R 2006.951 V 2.465 PTH -66.459 AZ 115.381

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.307	-19.626	316.10350	-57.0	9.9	-82.3	33.0	6.34864	0.835	-90.3	68.6	38.6	33.4	28.9	0.	1-2
3	-10.896	-20.176	305.56977	-58.4	8.9	-81.2	32.7	6.12712	0.871	-87.5	68.0	41.0	29.5	26.3	20.54038	2-3
4	-10.855	-19.218	319.21304	-62.7	10.1	-81.1	31.5	6.39892	0.826	-87.3	68.9	36.4	34.4	31.9	28.52467	3-4
5	-11.750	-19.027	324.82539	-55.9	10.9	-83.6	33.3	6.59343	0.797	-93.3	69.2	36.4	37.3	31.2	27.70681	4-5
6	-11.753	-20.025	314.27887	-51.0	9.5	-83.5	34.5	6.30002	0.842	-93.0	68.2	41.0	32.8	25.6	29.60476	5-6
7	-10.896	-20.176	305.56977	-58.4	8.9	-81.2	32.7	6.12712	0.871	-87.5	68.0	41.0	29.5	26.3	26.33749	6-7

JULY 31, 1964 13 HR 23 MIN 52 SEC 699 MS TAB NO 87 ATLAS PHOTO NO 87 POD SEQUENCE NO 841

TRAJECTORY DATA SEC TO IMPACT 116.100 ALT 267.69923 LAT -9.029 LON -24.062 R 2003.155 V 2.466 PTH -66.430 AZ 115.374

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.298	-19.637	311.74617	-57.0	9.8	-82.3	33.0	6.26112	0.835	-90.3	68.6	38.6	33.4	28.8	0.	1-2
3	-10.893	-20.180	301.36113	-58.4	8.9	-81.2	32.7	6.04273	0.871	-87.5	68.0	41.0	29.5	26.3	20.25557	2-3
4	-10.853	-19.235	314.81025	-62.7	10.1	-81.1	31.5	6.31067	0.827	-87.2	68.9	36.4	34.4	31.9	28.12860	3-4
5	-11.735	-19.047	324.28889	-55.9	10.9	-83.6	33.3	6.50236	0.797	-93.3	69.2	36.4	37.3	31.1	27.32231	4-5
6	-11.738	-20.031	304.94615	-51.0	9.5	-83.5	34.5	6.21317	0.842	-93.0	68.2	41.0	32.8	25.6	29.19228	5-6
7	-10.893	-20.180	301.36113	-58.4	8.9	-81.2	32.7	6.04273	0.871	-87.5	68.0	41.0	29.5	26.3	25.97324	6-7

JULY 31, 1964 13 HR 23 MIN 54 SEC 379 MS TAB NO 88 ATLAS PHOTO NO 88 POD SEQUENCE NO 843

TRAJECTORY DATA SEC TO IMPACT 114.420 ALT 263.90051 LAT -9.049 LON -24.019 R 1999.356 V 2.468 PTH -66.401 AZ 115.366

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.290	-19.649	307.38506	-57.0	9.8	-82.3	33.0	6.17354	0.835	-90.3	68.6	38.6	33.4	28.8	0.	1-2
3	-10.890	-20.184	297.14876	-58.4	8.9	-81.2	32.7	5.95827	0.871	-87.5	68.0	41.0	29.5	26.3	19.97051	2-3
4	-10.850	-19.252	310.40370	-62.7	10.1	-81.1	31.5	6.22234	0.827	-87.2	68.9	36.4	34.4	31.9	27.73225	3-4
5	-11.721	-19.067	319.73866	-55.9	10.9	-83.6	33.3	6.41122	0.797	-93.3	69.2	36.4	37.3	31.1	26.93761	4-5
6	-11.724	-20.037	305.60966	-51.0	9.5	-83.5	34.5	6.12624	0.842	-93.0	68.2	41.0	32.7	25.6	28.77956	5-6
7	-10.890	-20.184	297.14876	-58.4	8.9	-81.2	32.7	5.95827	0.871	-87.5	68.0	41.0	29.5	26.3	25.60869	6-7

JULY 31, 1964 13 HR 23 MIN 56 SEC 59 MS TAB NO 89 ATLAS PHOTO NO 89 POD SEQUENCE NO 845

TRAJECTORY DATA SEC TO IMPACT 112.740 ALT 260.09966 LAT -9.070 LON -23.975 R 1995.555 V 2.470 PTH -66.372 AZ 115.359

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.281	-19.661	303.01980	-57.0	9.8	-82.3	33.0	6.08566	0.835	-90.3	68.6	38.6	33.4	28.8	0.	1-2
3	-10.888	-20.188	292.93228	-58.4	8.9	-81.2	32.7	5.87372	0.871	-87.5	68.0	41.0	29.5	26.3	19.68518	2-3
4	-10.848	-19.270	305.99305	-62.7	10.1	-81.1	31.5	6.13392	0.827	-87.2	68.9	36.4	34.4	31.9	27.33560	3-4
5	-11.706	-19.087	315.18932	-55.9	10.9	-83.6	33.3	6.32000	0.798	-93.3	69.2	36.4	37.2	31.1	26.55242	4-5
6	-11.707	-20.043	301.26907	-51.0	9.5	-83.5	34.5	6.03924	0.843	-93.0	68.2	41.0	32.7	25.6	28.36655	5-6
7	-10.888	-20.188	292.93228	-58.4	8.9	-81.2	32.7	5.87372	0.871	-87.5	68.0	41.0	29.5	26.3	25.24373	6-7

JULY 31, 1964 13 HR 23 MIN 57 SEC 739 MS TAB NO 90 ATLAS PHOTO NO 90 POD SEQUENCE NO 847

TRAJECTORY DATA SEC TO IMPACT 111.060 ALT 256.29678 LAT -9.090 LON -23.932 R 1991.752 V 2.472 PTH -66.343 AZ 115.351

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.273	-19.672	298.65058	-57.0	9.8	-82.3	33.0	5.99811	0.836	-90.3	68.5	38.6	33.3	28.8	0.	1-2
3	-10.885	-20.192	288.71191	-58.4	8.9	-81.2	32.7	5.78910	0.871	-87.5	68.0	41.0	29.5	26.3	19.39971	2-3
4	-10.846	-19.287	301.57844	-62.7	10.1	-81.1	31.5	6.04543	0.827	-87.2	68.9	36.4	34.3	31.9	26.93867	3-4
5	-11.692	-19.107	310.63609	-55.9	10.9	-83.6	33.3	6.22871	0.798	-93.3	69.1	36.4	37.2	31.1	26.16703	4-5
6	-11.694	-20.050	296.92456	-51.1	9.5	-83.5	34.5	5.95215	0.843	-93.0	68.2	41.0	32.7	25.6	27.95331	5-6
7	-10.885	-20.192	288.71191	-58.4	8.9	-81.2	32.7	5.78910	0.871	-87.5	68.0	41.0	29.5	26.3	24.87855	6-7

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JULY 31, 1964 13 HR 23 MIN 59 SEC 419 MS TAB NO 91 ATLAS PHOTO NO 91 POD SEQUENCE NO 849

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				109.380	252.49179	-9.111	-23.888	1987.947	2.474	-66.314	115.344
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.264	-19.684	294.27674	-57.0	9.8	-82.3	33.0	5.91027	0.836	-90.3	68.5 38.6 33.3 28.8 0. 1-2
3	-10.882	-20.196	284.48706	-58.4	8.9	-81.2	32.7	5.70438	0.872	-87.5	68.0 41.0 29.5 26.3 19.11396 2-3
4	-10.844	-19.304	297.15919	-62.7	10.1	-81.0	31.5	5.95684	0.827	-87.2	68.9 36.4 34.3 31.8 26.54131 3-4
5	-11.677	-19.127	306.07822	-55.9	10.9	-83.6	33.3	6.13731	0.798	-93.3	69.1 36.4 37.2 31.1 25.78142 4-5
6	-11.680	-20.056	292.57555	-51.1	9.5	-83.5	34.4	5.86497	0.843	-93.0	68.2 41.0 32.7 25.6 27.53965 5-6
7	-10.882	-20.196	284.48706	-58.4	8.9	-81.2	32.7	5.70438	0.872	-87.5	68.0 41.0 29.5 26.3 24.51305 6-7

JULY 31, 1964 13 HR 24 MIN 1 SEC 99 MS TAB NO 92 ATLAS PHOTO NO 92 POD SEQUENCE NO 851

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				107.701	248.68471	-9.131	-23.843	1984.140	2.476	-66.285	115.336
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.256	-19.696	289.89793	-57.0	9.8	-82.3	33.0	5.82232	0.836	-90.3	68.5 38.6 33.3 28.8 0. 1-2
3	-10.879	-20.200	280.25741	-58.4	8.9	-81.2	32.7	5.61957	0.872	-87.5	68.0 41.0 29.5 26.3 18.82782 2-3
4	-10.841	-19.322	292.73486	-62.7	10.1	-81.0	31.6	5.86815	0.827	-87.2	68.8 36.4 34.3 31.8 26.14349 3-4
5	-11.662	-19.148	301.51527	-55.9	10.8	-83.6	33.3	6.04582	0.798	-93.3	69.1 36.4 37.2 31.0 25.39528 4-5
6	-11.665	-20.062	288.22169	-51.1	9.5	-83.5	34.4	5.77769	0.843	-93.0	68.2 41.0 32.7 25.5 27.12554 5-6
7	-10.879	-20.200	280.25741	-58.4	8.9	-81.2	32.7	5.61957	0.872	-87.5	68.0 41.0 29.5 26.3 24.14712 6-7

JULY 31, 1964 13 HR 24 MIN 2 SEC 779 MS TAB NO 93 ATLAS PHOTO NO 93 POD SEQUENCE NO 853

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				106.021	244.87561	-9.152	-23.799	1980.331	2.478	-66.256	115.329
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.247	-19.708	285.51512	-57.0	9.8	-82.3	33.0	5.73430	0.836	-90.3	68.5 38.6 33.3 28.8 0. 1-2
3	-10.876	-20.204	276.02383	-58.4	8.9	-81.2	32.7	5.53468	0.872	-87.5	68.0 41.0 29.5 26.3 18.54148 2-3
4	-10.839	-19.340	288.30657	-62.7	10.1	-81.0	31.6	5.77939	0.828	-87.2	68.8 36.4 34.3 31.8 25.74536 3-4
5	-11.647	-19.168	296.94842	-55.9	10.8	-83.6	33.3	5.95425	0.799	-93.3	69.1 36.4 37.1 31.0 25.00895 4-5
6	-11.650	-20.069	283.86392	-51.1	9.5	-83.5	34.4	5.69034	0.843	-93.0	68.2 41.0 32.7 25.5 26.71117 5-6
7	-10.876	-20.204	276.02383	-58.4	8.9	-81.2	32.7	5.53468	0.872	-87.5	68.0 41.0 29.5 26.3 23.78097 6-7

JULY 31, 1964 13 HR 24 MIN 4 SEC 459 MS TAB NO 94 ATLAS PHOTO NO 94 POD SEQUENCE NO 855

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				104.341	241.06421	-9.173	-23.755	1976.520	2.480	-66.226	115.321
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.239	-19.720	281.12805	-57.0	9.8	-82.3	33.0	5.64619	0.836	-90.3	68.5 38.6 33.3 28.8 0. 1-2
3	-10.874	-20.209	271.78606	-58.4	8.9	-81.2	32.7	5.44971	0.872	-87.5	68.0 41.0 29.5 26.3 18.25488 2-3
4	-10.837	-19.357	283.87405	-62.7	10.1	-81.0	31.6	5.69053	0.828	-87.2	68.8 36.4 34.3 31.8 25.34894 3-4
5	-11.633	-19.189	292.37737	-55.9	10.8	-83.6	33.3	5.86259	0.799	-93.3	69.0 36.4 37.1 31.0 24.62223 4-5
6	-11.635	-20.075	279.50190	-51.1	9.5	-83.6	34.4	5.60290	0.843	-93.0	68.2 41.0 32.7 25.5 26.29653 5-6
7	-10.874	-20.209	271.78606	-58.4	8.9	-81.2	32.7	5.44971	0.872	-87.5	68.0 41.0 29.5 26.3 23.41442 6-7

JULY 31, 1964 13 HR 24 MIN 6 SEC 139 MS TAB NO 95 ATLAS PHOTO NO 95 POD SEQUENCE NO 857

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				102.661	237.25098	-9.194	-23.710	1972.706	2.482	-66.197	115.313
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.230	-19.732	276.73720	-57.0	9.8	-82.3	33.0	5.55800	0.836	-90.3	68.5 38.6 33.3 28.7 0. 1-2
3	-10.871	-20.213	267.54451	-58.4	8.9	-81.2	32.7	5.36466	0.872	-87.5	68.0 41.0 29.5 26.3 17.96815 2-3
4	-10.834	-19.375	279.43778	-62.6	10.1	-81.0	31.6	5.60160	0.828	-87.2	68.8 36.4 34.3 31.8 24.94825 3-4
5	-11.618	-19.209	287.80261	-55.9	10.8	-83.6	33.3	5.77086	0.799	-93.3	69.0 36.4 37.1 31.0 24.23541 4-5
6	-11.621	-20.082	275.13615	-51.1	9.5	-83.6	34.4	5.51538	0.843	-93.0	68.2 41.0 32.7 25.5 25.88164 5-6
7	-10.871	-20.213	267.54451	-58.4	8.9	-81.2	32.7	5.36466	0.872	-87.5	68.0 41.0 29.5 26.3 23.04767 6-7

JULY 31, 1964 13 HR 24 MIN 7 SEC 818 MS TAB NO 96 ATLAS PHOTO NO 96 POD SEQUENCE NO 859

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				100.981	233.43536	-9.215	-23.665	1968.891	2.484	-66.167	115.306
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.221	-19.744	272.34193	-57.0	9.8	-82.3	33.0	5.46973	0.836	-90.3	68.5 38.6 33.2 28.7 0. 1-2
3	-10.868	-20.217	263.29864	-58.4	8.9	-81.2	32.7	5.27952	0.872	-87.5	68.0 41.0 29.5 26.3 17.68107 2-3
4	-10.832	-19.393	274.99715	-62.6	10.1	-81.0	31.6	5.51259	0.828	-87.2	68.8 36.4 34.2 31.8 24.54926 3-4
5	-11.603	-19.230	283.22349	-55.9	10.8	-83.6	33.3	5.67904	0.799	-93.3	69.0 36.4 37.1 30.9 23.84809 4-5
6	-11.606	-20.088	270.76601	-51.1	9.4	-83.6	34.4	5.42778	0.843	-93.0	68.2 41.0 32.6 25.5 25.46646 5-6
7	-10.868	-20.217	263.29864	-58.4	8.9	-81.2	32.7	5.27952	0.872	-87.5	68.0 41.0 29.5 26.3 22.68049 6-7

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JULY 31, 1964 13 HR 24 MIN 9 SEC 498 MS

TAB NO 97 ATLAS PHOTO NO 97 POD SEQUENCE NO 861

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		99.301	229.61780	-9.236	-23.620	1965.073	2.486	-66.137	115.298							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.213	-19.756	267.94273	-57.0	9.8	-82.3	33.0	5.38137	0.836	-90.3	68.5	38.6	33.2	28.7	0.	1-2
3	-10.865	-20.222	259.04885	-58.4	8.9	-81.2	32.7	5.19431	0.872	-87.5	68.0	41.0	29.5	26.3	17.39382	2-3
4	-10.830	-19.411	270.55262	-62.6	10.1	-81.0	31.6	5.42350	0.828	-87.2	68.8	36.4	34.2	31.7	24.16997	3-4
5	-11.588	-19.251	278.64053	-55.9	10.8	-83.6	33.3	5.58715	0.800	-93.3	69.0	36.4	37.0	30.9	23.46049	4-5
6	-11.591	-20.095	266.39197	-51.1	9.4	-83.6	34.4	5.34010	0.844	-93.0	68.2	41.0	32.6	25.5	25.05103	5-6
7	-10.865	-20.222	259.04885	-58.4	8.9	-81.2	32.7	5.19431	0.872	-87.5	68.0	41.0	29.5	26.3	22.31302	6-7

JULY 31, 1964 13 HR 24 MIN 11 SEC 178 MS

TAB NO 98 ATLAS PHOTO NO 98 POD SEQUENCE NO 863

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		97.621	225.79803	-9.257	-23.575	1961.253	2.488	-66.107	115.290							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.204	-19.769	263.53931	-57.0	9.8	-82.3	33.0	5.29294	0.837	-90.3	68.4	38.6	33.2	28.7	0.	1-2
3	-10.862	-20.226	254.79488	-58.4	8.9	-81.2	32.7	5.10901	0.872	-87.5	68.0	41.0	29.5	26.3	17.10637	2-3
4	-10.827	-19.429	266.10388	-62.6	10.1	-81.0	31.6	5.33432	0.828	-87.2	68.7	36.4	34.2	31.7	23.75040	3-4
5	-11.573	-19.271	274.05339	-55.9	10.8	-83.6	33.3	5.49517	0.800	-93.3	69.0	36.4	37.0	30.9	23.07269	4-5
6	-11.576	-20.101	262.01373	-51.2	9.4	-83.6	34.3	5.25234	0.844	-93.0	68.2	41.0	32.6	25.5	24.63534	5-6
7	-10.862	-20.226	254.79488	-58.4	8.9	-81.2	32.7	5.10901	0.872	-87.5	68.0	41.0	29.5	26.3	21.94523	6-7

JULY 31, 1964 13 HR 24 MIN 12 SEC 858 MS

TAB NO 99 ATLAS PHOTO NO 99 POD SEQUENCE NO 865

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		95.941	221.97638	-9.278	-23.530	1957.432	2.490	-66.077	115.282							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.195	-19.781	259.13202	-57.0	9.8	-82.3	33.0	5.20442	0.837	-90.3	68.4	38.6	33.2	28.7	0.	1-2
3	-10.859	-20.231	250.53712	-58.4	8.9	-81.2	32.7	5.02364	0.872	-87.5	68.0	41.0	29.5	26.3	16.81871	2-3
4	-10.825	-19.447	261.65135	-62.6	10.1	-81.0	31.6	5.24506	0.829	-87.2	68.7	36.4	34.2	31.7	23.35055	3-4
5	-11.558	-19.292	269.46252	-55.9	10.8	-83.6	33.3	5.40312	0.800	-93.3	68.9	36.4	37.0	30.9	22.68460	4-5
6	-11.561	-20.108	257.63168	-51.2	9.4	-83.6	34.3	5.16449	0.844	-93.0	68.1	41.0	32.6	25.5	24.21942	5-6
7	-10.859	-20.231	250.53712	-58.4	8.9	-81.2	32.7	5.02364	0.872	-87.5	68.0	41.0	29.5	26.3	21.57724	6-7

JULY 31, 1964 13 HR 24 MIN 14 SEC 538 MS

TAB NO 100 ATLAS PHOTO NO 100 POD SEQUENCE NO 867

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		94.261	218.15240	-9.299	-23.484	1953.608	2.491	-66.047	115.274							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.186	-19.793	254.72030	-57.0	9.8	-82.3	33.0	5.11581	0.837	-90.2	68.4	38.6	33.2	28.7	0.	1-2
3	-10.856	-20.236	246.27495	-58.4	8.9	-81.2	32.7	4.93817	0.872	-87.5	68.0	41.0	29.5	26.3	16.53081	2-3
4	-10.822	-19.465	257.19429	-62.6	10.1	-81.0	31.7	5.15572	0.829	-87.2	68.7	36.4	34.2	31.7	22.95036	3-4
5	-11.543	-19.313	264.86726	-55.9	10.8	-83.5	33.3	5.31097	0.800	-93.3	68.9	36.4	37.0	30.9	22.29622	4-5
6	-11.546	-20.115	253.24533	-51.2	9.4	-83.6	34.3	5.07657	0.844	-93.0	68.1	41.0	32.6	25.5	23.80315	5-6
7	-10.856	-20.236	246.27495	-58.4	8.9	-81.2	32.7	4.93817	0.872	-87.5	68.0	41.0	29.5	26.3	21.20885	6-7

JULY 31, 1964 13 HR 24 MIN 16 SEC 218 MS

TAB NO 101 ATLAS PHOTO NO 101 POD SEQUENCE NO 869

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		92.581	214.32629	-9.321	-23.438	1949.782	2.493	-66.017	115.266							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.178	-19.806	250.30437	-57.0	9.8	-82.3	33.0	5.02712	0.837	-90.2	68.4	38.6	33.2	28.7	0.	1-2
3	-10.853	-20.240	242.00860	-58.4	8.9	-81.2	32.7	4.85263	0.872	-87.5	67.9	41.0	29.5	26.3	16.24265	2-3
4	-10.820	-19.483	252.73292	-62.6	10.1	-81.0	31.7	5.08629	0.829	-87.2	68.7	36.4	34.1	31.7	22.54977	3-4
5	-11.528	-19.334	260.26793	-55.9	10.8	-83.5	33.3	5.21875	0.801	-93.3	68.9	36.4	36.9	30.8	21.90768	4-5
6	-11.531	-20.122	248.85496	-51.2	9.4	-83.6	34.3	4.98856	0.844	-93.0	68.1	41.0	32.6	25.5	23.38658	5-6
7	-10.853	-20.240	242.00860	-58.4	8.9	-81.2	32.7	4.85263	0.872	-87.5	67.9	41.0	29.5	26.3	20.84016	6-7

JULY 31, 1964 13 HR 24 MIN 17 SEC 898 MS

TAB NO 102 ATLAS PHOTO NO 102 POD SEQUENCE NO 871

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ							
		90.902	210.49806	-9.342	-23.392	1945.953	2.495	-65.987	115.258							
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.169	-19.818	245.88429	-57.0	9.8	-82.3	33.0	4.93835	0.837	-90.2	68.4	38.6	33.2	28.7	0.	1-2
3	-10.850	-20.245	237.73814	-58.4	8.9	-81.2	32.7	4.76700	0.872	-87.5	67.9	41.0	29.5	26.3	15.95430	2-3
4	-10.817	-19.501	248.26746	-62.6	10.1	-81.0	31.7	4.97677	0.829	-87.2	68.7	36.4	34.1	31.6	22.14892	3-4
5	-11.513	-19.355	255.66450	-55.9	10.7	-83.5	33.3	5.12645	0.801	-93.3	68.9	36.4	36.9	30.8	21.51864	4-5
6	-11.516	-20.129	244.46044	-51.2	9.4	-83.6	34.3	4.90047	0.844	-93.0	68.1	41.0	32.6	25.5	22.96974	5-6
7	-10.850	-20.245	237.73814	-58.4	8.9	-81.2	32.7	4.76700	0.872	-87.5	67.9	41.0	29.5	26.3	20.47118	6-7

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JULY 31, 1964 13 HR 24 MIN 19 SEC 578 MS TAB NO 103 ATLAS PHOTO NO 103 POD SEQUENCE NO 873

TRAJECTORY DATA		SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ						
		89.222		206.66769	-9.363	-23.346	1942.123	2.497	-65.956	115.250						
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.160	-19.831	241.46000	-57.0	9.8	-82.3	33.0	4.84949	0.837	-90.2	68.4	38.6	33.1	28.6	0.	1-2
3	-10.847	-20.250	233.46351	-58.3	8.9	-81.2	32.7	4.68129	0.872	-87.5	67.9	41.0	29.5	26.3	15.66580	2-3
4	-10.815	-20.520	243.79782	-62.6	10.1	-81.0	31.7	4.88718	0.829	-87.2	68.6	36.4	34.1	31.6	21.74776	3-4
5	-11.498	-19.376	251.05693	-55.9	10.7	-83.5	33.3	5.03406	0.801	-93.3	68.9	36.4	36.9	30.8	21.12942	4-5
6	-11.501	-20.136	240.08175	-51.2	9.4	-83.6	34.3	4.81229	0.844	-93.0	68.1	41.0	32.5	25.5	22.55264	5-6
7	-10.847	-20.250	233.46351	-58.3	8.9	-81.2	32.7	4.68129	0.872	-87.5	67.9	41.0	29.5	26.3	20.10207	6-7

JULY 31, 1964 13 HR 24 MIN 21 SEC 258 MS TAB NO 104 ATLAS PHOTO NO 104 POD SEQUENCE NO 875

TRAJECTORY DATA		SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ						
		87.542		202.83513	-9.385	-23.300	1938.290	2.499	-65.926	115.242						
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.151	-19.843	237.03146	-57.0	9.8	-82.3	33.0	4.76055	0.837	-90.2	68.4	38.6	33.1	28.6	0.	1-2
3	-10.844	-20.255	229.18467	-58.3	8.9	-81.2	32.7	4.59549	0.872	-87.5	67.9	41.0	29.5	26.3	15.37698	2-3
4	-10.812	-20.538	239.32397	-62.5	10.1	-81.0	31.7	4.79750	0.829	-87.2	68.6	36.4	34.1	31.6	21.34631	3-4
5	-11.483	-19.397	246.44519	-55.9	10.7	-83.5	33.3	4.94159	0.801	-93.3	68.8	36.4	36.9	30.8	20.73989	4-5
6	-11.486	-20.143	235.65882	-51.2	9.4	-83.6	34.3	4.72403	0.844	-93.0	68.1	41.0	32.5	25.5	22.13527	5-6
7	-10.844	-20.255	229.18467	-58.3	8.9	-81.2	32.7	4.59549	0.872	-87.5	67.9	41.0	29.5	26.3	19.73246	6-7

JULY 31, 1964 13 HR 24 MIN 22 SEC 938 MS TAB NO 105 ATLAS PHOTO NO 105 POD SEQUENCE NO 877

TRAJECTORY DATA		SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ						
		85.862		199.00041	-9.407	-23.253	1934.456	2.501	-65.895	115.234						
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.142	-19.856	232.59868	-57.0	9.8	-82.3	33.0	4.67152	0.838	-90.2	68.4	38.6	33.1	28.6	0.	1-2
3	-10.840	-20.260	224.90166	-58.3	8.9	-81.2	32.7	4.50961	0.872	-87.5	67.9	41.0	29.5	26.2	15.08791	2-3
4	-10.810	-20.556	234.84594	-62.5	10.1	-81.0	31.7	4.70773	0.830	-87.2	68.6	36.4	34.1	31.6	20.94456	3-4
5	-11.468	-19.418	241.82931	-55.9	10.7	-83.5	33.3	4.84903	0.802	-93.3	68.8	36.4	36.8	30.8	20.35016	4-5
6	-11.470	-20.150	231.25170	-51.2	9.4	-83.6	34.2	4.63569	0.845	-93.0	68.1	41.0	32.5	25.5	21.71762	5-6
7	-10.840	-20.260	224.90166	-58.3	8.9	-81.2	32.7	4.50961	0.872	-87.5	67.9	41.0	29.5	26.2	19.36254	6-7

JULY 31, 1964 13 HR 24 MIN 24 SEC 617 MS TAB NO 106 ATLAS PHOTO NO 106 POD SEQUENCE NO 879

TRAJECTORY DATA		SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ						
		84.182		195.16376	-9.428	-23.207	1930.619	2.503	-65.864	115.226						
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.133	-19.869	228.16191	-57.0	9.8	-82.3	33.0	4.58241	0.838	-90.2	68.3	38.6	33.1	28.6	0.	1-2
3	-10.837	-20.265	220.61467	-58.3	8.9	-81.2	32.7	4.42365	0.872	-87.5	67.9	41.0	29.4	26.2	14.79869	2-3
4	-10.807	-19.575	230.36397	-62.5	10.1	-81.0	31.8	4.61789	0.830	-87.2	68.6	36.4	34.1	31.6	20.54255	3-4
5	-11.452	-19.439	237.20951	-55.9	10.7	-83.5	33.3	4.75640	0.802	-93.3	68.8	36.4	36.8	30.7	19.96005	4-5
6	-11.455	-20.157	226.84060	-51.3	9.4	-83.6	34.2	4.54726	0.845	-93.0	68.1	41.0	32.5	25.4	21.29975	5-6
7	-10.837	-20.265	220.61467	-58.3	8.9	-81.2	32.7	4.42365	0.872	-87.5	67.9	41.0	29.4	26.2	18.99231	6-7

JULY 31, 1964 13 HR 24 MIN 26 SEC 297 MS TAB NO 107 ATLAS PHOTO NO 107 POD SEQUENCE NO 881

TRAJECTORY DATA		SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ						
		82.502		191.32468	-9.450	-23.160	1926.780	2.505	-65.833	115.217						
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.124	-19.882	223.72055	-57.0	9.8	-82.3	33.0	4.49321	0.838	-90.2	68.3	38.6	33.1	28.6	0.	1-2
3	-10.834	-20.270	216.32318	-58.3	8.9	-81.2	32.7	4.33760	0.872	-87.5	67.9	41.0	29.4	26.2	14.50914	2-3
4	-10.804	-19.594	225.87748	-62.5	10.1	-81.0	31.8	4.52795	0.830	-87.2	68.6	36.4	34.0	31.5	20.14023	3-4
5	-11.437	-19.461	232.58522	-55.9	10.7	-83.5	33.3	4.66367	0.802	-93.3	68.8	36.4	36.8	30.7	19.56954	4-5
6	-11.440	-20.164	222.42496	-51.3	9.4	-83.6	34.2	4.45875	0.845	-93.0	68.1	41.0	32.5	25.4	20.88159	5-6
7	-10.834	-20.270	216.32318	-58.3	8.9	-81.2	32.7	4.33760	0.872	-87.5	67.9	41.0	29.4	26.2	18.62177	6-7

JULY 31, 1964 13 HR 24 MIN 27 SEC 977 MS TAB NO 108 ATLAS PHOTO NO 108 POD SEQUENCE NO 883

TRAJECTORY DATA		SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ						
		80.822		187.48363	-9.472	-23.113	1922.939	2.508	-65.803	115.209						
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.115	-19.894	219.27518	-57.0	9.8	-82.3	33.0	4.40393	0.838	-90.2	68.3	38.6	33.1	28.6	0.	1-2
3	-10.831	-20.275	212.02767	-58.3	8.9	-81.2	32.7	4.25147	0.872	-87.5	67.9	41.0	29.4	26.2	14.21952	2-3
4	-10.802	-19.612	221.38697	-62.5	10.1	-81.0	31.8	4.43794	0.830	-87.2	68.6	36.4	34.0	31.5	19.73762	3-4
5	-11.422	-19.482	227.95695	-55.9	10.7	-83.5	33.3	4.57087	0.802	-93.3	68.7	36.4	36.8	30.7	19.17883	4-5
6	-11.425	-20.171	218.00530	-51.3	9.4	-83.6	34.2	4.37015	0.845	-93.0	68.1	41.0	32.5	25.4	20.46316	5-6
7	-10.831	-20.275	212.02767	-58.3	8.9	-81.2	32.7	4.25147	0.872	-87.5	67.9	41.0	29.4	26.2	18.25092	6-7

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JULY 31, 1964 13 HR 24 MIN 29 SEC 657 MS
 TAB NO 109 ATLAS PHOTO NO 109 POD SEQUENCE NO 885

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				79.142	183.64C08	-9.494	-23.065	1919.095	2.510	-65.771	115.201					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.106	-19.907	214.82355	-57.0	9.8	-82.3	33.0	4.31453	0.838	-90.2	68.3	38.6	33.1	28.6	0.	1-2
3	-10.827	-20.280	207.72625	-58.3	8.9	-81.2	32.7	4.16522	0.872	-87.5	67.9	41.0	29.4	26.2	13.92937	2-3
4	-10.799	-19.631	216.89022	-62.5	10.1	-81.0	31.8	4.34779	0.830	-87.2	68.5	36.4	34.0	31.5	19.33441	3-4
5	-11.406	-19.504	223.32221	-55.9	10.7	-83.5	33.3	4.47794	0.803	-93.3	68.7	36.4	36.7	30.7	18.78747	4-5
6	-11.409	-20.179	213.57948	-51.3	9.4	-83.6	34.2	4.28143	0.845	-93.0	68.1	41.0	32.4	25.4	20.04413	5-6
7	-10.827	-20.280	207.72625	-58.3	8.9	-81.2	32.7	4.16522	0.872	-87.5	67.9	41.0	29.4	26.2	17.87952	6-7

JULY 31, 1964 13 HR 24 MIN 31 SEC 337 MS
 TAB NO 110 ATLAS PHOTO NO 110 POD SEQUENCE NO 887

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				77.462	179.79465	-9.516	-23.018	1915.250	2.512	-65.740	115.192					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.097	-19.921	210.36654	-57.0	9.7	-82.3	33.0	4.22501	0.838	-90.2	68.3	38.6	33.0	28.5	0.	1-2
3	-10.824	-20.285	203.41970	-58.3	8.9	-81.2	32.7	4.07886	0.872	-87.5	67.9	41.0	29.4	26.2	13.63875	2-3
4	-10.796	-19.650	212.38809	-62.5	10.1	-81.0	31.8	4.25755	0.831	-87.2	68.5	36.4	34.0	31.5	18.93072	3-4
5	-11.391	-19.525	218.68193	-55.9	10.7	-83.5	33.2	4.38489	0.803	-93.3	68.7	36.4	36.7	30.6	18.39578	4-5
6	-11.394	-20.186	209.14834	-51.3	9.4	-83.6	34.2	4.19261	0.845	-93.0	68.1	41.0	32.4	25.4	19.62462	5-6
7	-10.824	-20.285	203.41970	-58.3	8.9	-81.2	32.7	4.07886	0.872	-87.5	67.9	41.0	29.4	26.2	17.50759	6-7

JULY 31, 1964 13 HR 24 MIN 33 SEC 17 MS
 TAB NO 111 ATLAS PHOTO NO 111 POD SEQUENCE NO 889

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				75.782	175.94688	-9.538	-22.970	1911.402	2.514	-65.709	115.184					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.088	-19.934	205.90516	-57.0	9.7	-82.3	33.0	4.13541	0.838	-90.2	68.3	38.6	33.0	28.5	0.	1-2
3	-10.821	-20.291	199.10879	-58.3	8.9	-81.2	32.8	3.99242	0.873	-87.5	67.9	41.0	29.4	26.2	13.34795	2-3
4	-10.793	-19.669	207.88162	-62.5	10.1	-80.9	31.8	4.16721	0.831	-87.2	68.5	36.4	34.0	31.5	18.52675	3-4
5	-11.375	-19.547	214.03738	-55.9	10.7	-83.5	33.2	4.29176	0.803	-93.3	68.7	36.4	36.7	30.6	18.00379	4-5
6	-11.378	-20.194	204.71287	-51.3	9.3	-83.6	34.2	4.10370	0.845	-93.0	68.0	41.0	32.4	25.4	19.20483	5-6
7	-10.821	-20.291	199.10879	-58.3	8.9	-81.2	32.8	3.99242	0.873	-87.5	67.9	41.0	29.4	26.2	17.13544	6-7

JULY 31, 1964 13 HR 24 MIN 34 SEC 697 MS
 TAB NO 112 ATLAS PHOTO NO 112 POD SEQUENCE NO 891

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				74.103	172.09694	-9.560	-22.922	1907.552	2.516	-65.677	115.175					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.078	-19.947	201.43960	-57.0	9.7	-82.3	33.0	4.04572	0.839	-90.2	68.3	38.7	33.0	28.5	0.	1-2
3	-10.817	-20.296	194.79372	-58.3	8.9	-81.2	32.8	3.90590	0.873	-87.5	67.9	41.0	29.4	26.2	13.05697	2-3
4	-10.790	-19.688	203.37105	-62.5	10.1	-80.9	31.9	4.07679	0.831	-87.2	68.5	36.4	33.9	31.4	18.12251	3-4
5	-11.360	-19.569	209.38879	-55.9	10.6	-83.5	33.2	4.19855	0.804	-93.3	68.7	36.4	36.6	30.6	17.61142	4-5
6	-11.363	-20.201	200.27423	-51.3	9.3	-83.6	34.1	4.01470	0.846	-93.0	68.0	41.0	32.4	25.4	18.78484	5-6
7	-10.817	-20.296	194.79372	-58.3	8.9	-81.2	32.8	3.90590	0.873	-87.5	67.9	41.0	29.4	26.2	16.76290	6-7

JULY 31, 1964 13 HR 24 MIN 36 SEC 377 MS
 TAB NO 113 ATLAS PHOTO NO 113 POD SEQUENCE NO 893

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				72.423	168.24486	-9.583	-22.874	1903.700	2.518	-65.646	115.167					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.069	-19.960	196.96985	-57.0	9.7	-82.3	33.0	3.95595	0.839	-90.2	68.2	38.7	33.0	28.5	0.	1-2
3	-10.814	-20.302	190.47449	-58.3	8.9	-81.2	32.8	3.81929	0.873	-87.5	67.9	41.0	29.4	26.2	12.76582	2-3
4	-10.787	-19.707	198.85635	-62.4	10.1	-80.9	31.9	3.98629	0.831	-87.2	68.5	36.4	33.9	31.4	17.71796	3-4
5	-11.344	-19.591	204.73610	-55.9	10.6	-83.5	33.2	4.10526	0.804	-93.3	68.6	36.4	36.6	30.6	17.21875	4-5
6	-11.347	-20.209	195.82945	-51.3	9.3	-83.6	34.1	3.92562	0.846	-93.0	68.0	41.0	32.4	25.4	18.36458	5-6
7	-10.814	-20.302	190.47449	-58.3	8.9	-81.2	32.8	3.81929	0.873	-87.5	67.9	41.0	29.4	26.2	16.39014	6-7

JULY 31, 1964 13 HR 24 MIN 38 SEC 57 MS
 TAB NO 114 ATLAS PHOTO NO 114 POD SEQUENCE NO 895

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				70.743	164.39058	-9.605	-22.826	1899.846	2.520	-65.614	115.158					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.060	-19.974	192.49590	-57.0	9.7	-82.3	33.0	3.86610	0.839	-90.2	68.2	38.7	33.0	28.5	0.	1-2
3	-10.810	-20.307	186.15104	-58.3	8.9	-81.2	32.8	3.73260	0.873	-87.5	67.9	41.0	29.4	26.2	12.47441	2-3
4	-10.785	-19.726	194.33747	-62.4	10.1	-80.9	31.9	3.89571	0.831	-87.2	68.4	36.4	33.9	31.4	17.31318	3-4
5	-11.329	-19.613	200.07932	-55.9	10.6	-83.5	33.2	4.01188	0.804	-93.3	68.6	36.4	36.6	30.5	16.82590	4-5
6	-11.331	-20.217	191.38145	-51.3	9.3	-83.6	34.1	3.83646	0.846	-93.0	68.0	41.0	32.4	25.4	17.94408	5-6
7	-10.810	-20.307	186.15104	-58.3	8.9	-81.2	32.8	3.73260	0.873	-87.5	67.9	41.0	29.4	26.2	16.01697	6-7

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JULY 31, 1964 13 HR 24 MIN 39 SEC 737 MS

TAB NO 115

ATLAS PHOTO NO 115

POD SEQUENCE NO 897

TRAJECTORY DATA

SEC TO IMPACT
69.063

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.051	-19.987	188.01763	-57.0	9.7	-82.3	33.0	3.77615	0.839	-90.2	68.2	38.7	33.0	28.5	0.	1-2
3	-10.807	-20.313	181.82333	-58.3	8.9	-81.2	32.8	3.64582	0.873	-87.5	67.9	41.0	29.4	26.2	12.18273	2-3
4	-10.782	-19.745	189.81433	-62.4	10.1	-80.9	31.9	3.80504	0.831	-87.2	68.4	36.4	33.9	31.4	16.90810	3-4
5	-11.313	-19.635	195.41833	-55.9	10.6	-83.5	33.2	3.91842	0.804	-93.3	68.6	36.4	36.6	30.5	16.43275	4-5
6	-11.316	-20.225	186.92917	-51.4	9.3	-83.6	34.1	3.74721	0.846	-93.0	68.0	41.0	32.4	25.4	17.52335	5-6
7	-10.807	-20.313	181.82333	-58.3	8.9	-81.2	32.8	3.64582	0.873	-87.5	67.9	41.0	29.4	26.2	15.64350	6-7

JULY 31, 1964 13 HR 24 MIN 41 SEC 416 MS

TAB NO 116

ATLAS PHOTO NO 116

POD SEQUENCE NO 899

TRAJECTORY DATA

SEC TO IMPACT
67.383

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.041	-20.001	183.53511	-57.0	9.7	-82.3	33.0	3.68613	0.839	-90.2	68.2	38.7	32.9	28.4	0.	1-2
3	-10.803	-20.319	177.49137	-58.3	8.9	-81.2	32.8	3.55956	0.873	-87.5	67.9	41.0	29.4	26.2	11.89091	2-3
4	-10.779	-19.764	185.28702	-62.4	10.1	-80.9	31.9	3.71428	0.832	-87.2	68.4	36.4	33.9	31.3	16.50271	3-4
5	-11.297	-19.657	190.75323	-55.9	10.6	-83.5	33.2	3.82488	0.805	-93.3	68.6	36.4	36.5	30.5	16.03912	4-5
6	-11.303	-20.232	182.47267	-51.4	9.3	-83.6	34.1	3.65767	0.846	-93.0	68.0	41.0	32.3	25.4	17.10234	5-6
7	-10.803	-20.319	177.49137	-58.3	8.9	-81.2	32.8	3.55956	0.873	-87.5	67.9	41.0	29.4	26.2	15.26983	6-7

JULY 31, 1964 13 HR 24 MIN 43 SEC 96 MS

TAB NO 117

ATLAS PHOTO NO 117

POD SEQUENCE NO 901

TRAJECTORY DATA

SEC TO IMPACT
65.703

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.032	-20.014	179.04818	-57.0	9.7	-82.3	33.0	3.59601	0.839	-90.2	68.2	38.7	32.9	28.4	0.	1-2
3	-10.800	-20.324	173.15499	-58.3	8.9	-81.2	32.8	3.47201	0.873	-87.5	67.9	41.0	29.4	26.2	11.59885	2-3
4	-10.776	-19.784	180.75533	-62.4	10.1	-80.9	31.9	3.62344	0.832	-87.2	68.4	36.4	33.8	31.3	16.09708	3-4
5	-11.282	-19.679	186.08380	-55.9	10.6	-83.5	33.2	3.73125	0.805	-93.3	68.5	36.4	36.5	30.5	15.64529	4-5
6	-11.284	-20.240	178.01175	-51.4	9.3	-83.6	34.1	3.56845	0.846	-93.0	68.0	41.0	32.3	25.3	16.68109	5-6
7	-10.800	-20.324	173.15499	-58.3	8.9	-81.2	32.8	3.47201	0.873	-87.5	67.9	41.0	29.4	26.2	14.69565	6-7

JULY 31, 1964 13 HR 24 MIN 44 SEC 776 MS

TAB NO 118

ATLAS PHOTO NO 118

POD SEQUENCE NO 903

TRAJECTORY DATA

SEC TO IMPACT
64.023

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.022	-20.027	174.55975	-57.0	9.7	-82.3	33.0	3.50587	0.840	-90.2	68.2	38.7	32.9	28.4	0.	1-2
3	-10.796	-20.330	168.81674	-58.3	8.9	-81.2	32.8	3.38502	0.873	-87.5	67.9	41.0	29.4	26.2	11.30696	2-3
4	-10.773	-19.803	176.22243	-62.4	10.1	-80.9	31.9	3.53258	0.832	-87.2	68.4	36.4	33.8	31.3	15.69163	3-4
5	-11.264	-19.700	181.41353	-55.9	10.6	-83.5	33.2	3.63761	0.805	-93.3	68.5	36.4	36.5	30.4	15.25156	4-5
6	-11.269	-20.248	173.54921	-51.4	9.3	-83.6	34.1	3.47899	0.846	-93.0	68.0	41.0	32.3	25.3	16.26012	5-6
7	-10.796	-20.330	168.81674	-58.3	8.9	-81.2	32.8	3.38502	0.873	-87.5	67.9	41.0	29.4	26.2	14.52162	6-7

JULY 31, 1964 13 HR 24 MIN 46 SEC 456 MS

TAB NO 119

ATLAS PHOTO NO 119

POD SEQUENCE NO 905

TRAJECTORY DATA

SEC TO IMPACT
62.343

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.013	-20.041	170.06895	-57.0	9.7	-82.3	33.0	3.41567	0.840	-90.2	68.2	38.7	32.9	28.4	0.	1-2
3	-10.792	-20.335	164.47582	-58.3	8.9	-81.2	32.8	3.29758	0.873	-87.5	67.9	41.0	29.4	26.1	11.01498	2-3
4	-10.769	-19.822	171.68731	-62.4	10.1	-80.9	32.0	3.44166	0.832	-87.2	68.4	36.4	33.8	31.3	15.28623	3-4
5	-11.250	-19.722	176.74131	-55.9	10.6	-83.5	33.2	3.54392	0.806	-93.3	68.5	36.4	36.5	30.4	14.85778	4-5
6	-11.253	-20.255	169.06417	-51.4	9.3	-83.6	34.0	3.38949	0.847	-93.0	68.0	41.0	32.3	25.3	15.83927	5-6
7	-10.792	-20.335	164.47582	-58.3	8.9	-81.2	32.8	3.29758	0.873	-87.5	67.9	41.0	29.4	26.1	14.14722	6-7

JULY 31, 1964 13 HR 24 MIN 46 SEC 136 MS

TAB NO 120

ATLAS PHOTO NO 120

POD SEQUENCE NO 907

TRAJECTORY DATA

SEC TO IMPACT
60.663

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.003	-20.054	165.57352	-57.0	9.7	-82.3	33.0	3.32539	0.840	-90.2	68.1	38.7	32.9	28.4	0.	1-2
3	-10.789	-20.341	160.13035	-58.3	8.9	-81.2	32.8	3.21085	0.873	-87.5	67.8	41.0	29.4	26.1	10.72283	2-3
4	-10.766	-19.841	167.14762	-62.4	10.1	-80.9	32.0	3.35066	0.832	-87.2	68.3	36.4	33.8	31.3	14.88049	3-4
5	-11.234	-19.744	172.06655	-55.9	10.6	-83.5	33.2	3.45015	0.806	-93.3	68.5	36.4	36.4	30.4	14.46361	4-5
6	-11.237	-20.263	164.61654	-51.4	9.3	-83.6	34.0	3.29989	0.847	-93.0	68.0	41.0	32.3	25.3	15.41813	5-6
7	-10.789	-20.341	160.13035	-58.3	8.9	-81.2	32.8	3.21085	0.873	-87.5	67.8	41.0	29.4	26.1	13.77261	6-7

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TAB NO 121 ATLAS PHOTO NO 121 POD SEQUENCE NO 909

JULY 31, 1964 13 HR 24 MIN 49 SEC 816 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				58.983		137.34807	-9.764	-22.482	1872.803	2.535	-65.389	115.096		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.994	-20.068	161.07339	-57.0	9.7	-82.3	33.0	3.23501	0.840	-90.2	68.1	38.7	28.4	0.
3	-10.785	-20.346	155.78022	-58.3	8.9	-81.2	32.8	3.12362	0.873	-87.5	67.8	41.0	29.3	26.1
4	-10.763	-19.861	162.60326	-62.4	10.1	-80.9	32.0	3.25957	0.833	-87.2	68.3	36.4	33.8	31.3
5	-11.218	-19.766	167.38315	-55.9	10.6	-83.5	33.2	3.35628	0.806	-93.3	68.4	36.4	36.4	30.4
6	-11.221	-20.271	160.14026	-51.4	9.3	-83.6	34.0	3.21020	0.847	-93.0	68.0	41.0	32.3	25.3
7	-10.785	-20.346	155.78022	-58.3	8.9	-81.2	32.8	3.12362	0.873	-87.5	67.8	41.0	29.3	26.1

TAB NO 122 ATLAS PHOTO NO 122 POD SEQUENCE NO 911

JULY 31, 1964 13 HR 24 MIN 51 SEC 496 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				57.304		133.47586	-9.787	-22.432	1868.931	2.537	-65.356	115.087		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.994	-20.081	156.56863	-57.0	9.7	-82.3	33.0	3.14453	0.840	-90.2	68.1	38.7	28.4	0.
3	-10.781	-20.352	151.42551	-58.3	8.9	-81.2	32.8	3.03670	0.873	-87.5	67.8	41.0	29.3	26.1
4	-10.760	-19.880	158.05429	-62.3	10.1	-80.9	32.0	3.16828	0.833	-87.2	68.3	36.4	33.8	31.2
5	-11.202	-19.788	162.69716	-55.9	10.5	-83.5	33.2	3.26222	0.806	-93.3	68.4	36.4	36.4	30.4
6	-11.205	-20.279	155.66139	-51.4	9.3	-83.6	34.0	3.12041	0.847	-93.0	67.9	41.0	32.3	25.3
7	-10.781	-20.352	151.42551	-58.3	8.9	-81.2	32.8	3.03670	0.873	-87.5	67.8	41.0	29.3	26.1

TAB NO 123 ATLAS PHOTO NO 123 POD SEQUENCE NO 912

JULY 31, 1964 13 HR 24 MIN 52 SEC 336 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				56.464		131.53512	-9.798	-22.407	1866.994	2.538	-65.340	115.083		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.979	-20.088	154.31474	-57.0	9.7	-82.3	33.0	3.09926	0.840	-90.2	68.1	38.7	28.4	0.
3	-10.779	-20.355	149.24668	-58.3	8.9	-81.2	32.8	2.99262	0.873	-87.5	67.8	41.0	29.3	26.1
4	-10.758	-19.890	155.77833	-62.3	10.1	-80.9	32.0	3.12275	0.833	-87.2	68.3	36.4	33.7	31.2
5	-11.194	-19.799	160.35275	-55.9	10.5	-83.5	33.2	3.21531	0.806	-93.3	68.4	36.4	36.4	30.3
6	-11.197	-20.283	153.42048	-51.5	9.3	-83.6	34.0	3.07549	0.847	-92.9	67.9	41.0	32.3	25.3
7	-10.779	-20.355	149.24668	-58.3	8.9	-81.2	32.8	2.99262	0.873	-87.5	67.8	41.0	29.3	26.1

TAB NO 124 ATLAS PHOTO NO 124 POD SEQUENCE NO 913

JULY 31, 1964 13 HR 24 MIN 53 SEC 176 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				55.624		129.60152	-9.810	-22.382	1865.057	2.539	-65.324	115.078		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.974	-20.095	152.05934	-57.0	9.7	-82.3	33.0	3.05397	0.840	-90.2	68.1	38.7	28.4	0.
3	-10.777	-20.358	147.06634	-58.3	8.9	-81.2	32.8	2.94890	0.873	-87.5	67.8	41.0	29.3	26.1
4	-10.757	-19.899	153.50083	-62.3	10.1	-80.9	32.0	3.07710	0.833	-87.2	68.3	36.4	33.7	31.2
5	-11.186	-19.810	154.00677	-55.9	10.5	-83.5	33.2	3.16827	0.807	-93.3	68.4	36.4	36.4	30.3
6	-11.189	-20.287	151.17804	-51.5	9.3	-83.6	34.0	3.03054	0.847	-92.9	67.9	41.0	32.2	25.3
7	-10.777	-20.358	147.06634	-58.3	8.9	-81.2	32.8	2.94890	0.873	-87.5	67.8	41.0	29.3	26.1

TAB NO 125 ATLAS PHOTO NO 125 POD SEQUENCE NO 914

JULY 31, 1964 13 HR 24 MIN 54 SEC 16 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				54.784		127.66350	-9.822	-22.357	1863.119	2.540	-65.307	115.074		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.967	-20.102	149.80297	-57.0	9.7	-82.3	33.0	3.00865	0.840	-90.2	68.1	38.7	28.3	0.
3	-10.775	-20.361	144.88504	-58.3	8.9	-81.2	32.8	2.90516	0.873	-87.5	67.8	41.0	29.3	26.1
4	-10.755	-19.909	151.22239	-62.3	10.1	-80.9	32.0	3.03143	0.833	-87.2	68.3	36.4	33.7	31.2
5	-11.178	-19.821	155.64987	-55.9	10.5	-83.5	33.2	3.12121	0.807	-93.3	68.4	36.4	36.3	30.3
6	-11.181	-20.291	148.94463	-51.5	9.3	-83.6	34.0	2.98557	0.847	-92.9	67.9	41.0	32.2	25.3
7	-10.775	-20.361	144.88504	-58.3	8.9	-81.2	32.8	2.90516	0.873	-87.5	67.8	41.0	29.3	26.1

TAB NO 126 ATLAS PHOTO NO 126 POD SEQUENCE NO 915

JULY 31, 1964 13 HR 24 MIN 54 SEC 856 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				53.944		125.72485	-9.833	-22.332	1861.180	2.541	-65.291	115.069		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.965	-20.108	147.54533	-57.0	9.7	-82.3	33.0	2.96331	0.840	-90.2	68.1	38.7	28.3	0.
3	-10.773	-20.364	142.70247	-58.3	8.9	-81.2	32.8	2.86139	0.873	-87.5	67.8	41.0	29.3	26.1
4	-10.754	-19.919	148.94269	-62.3	10.1	-80.9	32.0	2.98573	0.833	-87.2	68.3	36.4	33.7	31.2
5	-11.170	-19.833	153.31173	-55.9	10.5	-83.5	33.2	3.07412	0.807	-93.3	68.4	36.4	36.3	30.3
6	-11.173	-20.295	146.68999	-51.5	9.3	-83.6	34.0	2.94057	0.847	-92.9	67.9	41.0	32.2	25.3
7	-10.773	-20.364	142.70247	-58.3	8.9	-81.2	32.8	2.86139	0.873	-87.5	67.8	41.0	29.3	26.1

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JULY 31, 1964 13 HR 24 MIN 55 SEC 696 MS

TAB NO 127

ATLAS PHOTO NO 127

POD SEQUENCE NO 916

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				53.104		123.78574		-9.845		-22.306		1859.241		2.542		-65.274		115.065	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.960	-20.115	145.28664	-57.0	9.7	-82.3	33.0	2.91794	0.841	-90.2	68.1	38.7	32.8	28.3	0.	1-2			
3	-10.771	-20.367	140.51867	-58.3	8.9	-81.2	32.8	2.81761	0.873	-87.5	67.8	41.0	29.3	26.1	9.40494	2-3			
4	-10.752	-19.929	146.66196	-62.3	10.1	-80.9	32.0	2.94001	0.833	-87.2	68.2	36.4	33.7	31.2	13.05057	3-4			
5	-11.162	-19.844	150.96253	-56.0	10.5	-83.5	33.2	3.02702	0.807	-93.3	68.4	36.4	36.3	30.3	12.68575	4-5			
6	-11.165	-20.299	144.44431	-51.5	9.3	-83.6	34.0	2.89556	0.847	-92.9	67.9	41.0	32.2	25.3	13.51915	5-6			
7	-10.771	-20.367	140.51867	-58.3	8.9	-81.2	32.8	2.81761	0.873	-87.5	67.8	41.0	29.3	26.1	12.08237	6-7			

JULY 31, 1964 13 HR 24 MIN 56 SEC 536 MS

TAB NO 128

ATLAS PHOTO NO 128

POD SEQUENCE NO 917

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				52.264		121.84589		-9.857		-22.281		1857.301		2.543		-65.258		115.060	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.955	-20.122	143.02658	-57.0	9.7	-82.3	33.0	2.87255	0.841	-90.2	68.1	38.7	32.8	28.3	0.	1-2			
3	-10.770	-20.370	138.33393	-58.3	8.9	-81.2	32.8	2.77380	0.873	-87.5	67.8	41.0	29.3	26.1	9.25815	2-3			
4	-10.750	-19.938	144.37985	-62.3	10.1	-80.9	32.0	2.89426	0.833	-87.2	68.2	36.4	33.7	31.2	12.68672	3-4			
5	-11.154	-19.855	148.61199	-56.0	10.5	-83.5	33.2	2.97989	0.807	-93.3	68.4	36.4	36.3	30.3	12.48777	4-5			
6	-11.157	-20.303	142.19726	-51.5	9.3	-83.6	33.9	2.85051	0.847	-92.9	67.9	41.0	32.2	25.3	13.30774	5-6			
7	-10.770	-20.370	138.33393	-58.3	8.9	-81.2	32.8	2.77380	0.873	-87.5	67.8	41.0	29.3	26.1	11.89419	6-7			

JULY 31, 1964 13 HR 24 MIN 57 SEC 375 MS

TAB NO 129

ATLAS PHOTO NO 129

POD SEQUENCE NO 918

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				51.424		119.90561		-9.868		-22.256		1855.361		2.544		-65.241		115.055	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.950	-20.129	140.76551	-57.0	9.7	-82.3	33.0	2.82714	0.841	-90.2	68.1	38.7	32.8	28.3	0.	1-2			
3	-10.768	-20.373	136.14799	-58.3	8.9	-81.2	32.8	2.72997	0.873	-87.5	67.8	41.0	29.3	26.1	9.11136	2-3			
4	-10.749	-19.948	142.09675	-62.3	10.1	-80.9	32.1	2.84849	0.833	-87.2	68.2	36.4	33.7	31.2	12.64299	3-4			
5	-11.146	-19.866	146.26047	-56.0	10.5	-83.5	33.2	2.93274	0.807	-93.3	68.4	36.4	36.3	30.3	12.48777	4-5			
6	-11.149	-20.307	139.94921	-51.5	9.3	-83.6	33.9	2.80545	0.847	-92.9	67.9	41.0	32.2	25.3	13.09630	5-6			
7	-10.768	-20.373	136.14799	-58.3	8.9	-81.2	32.8	2.72997	0.873	-87.5	67.8	41.0	29.3	26.1	11.70580	6-7			

JULY 31, 1964 13 HR 24 MIN 58 SEC 215 MS

TAB NO 130

ATLAS PHOTO NO 130

POD SEQUENCE NO 919

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				50.584		117.96458		-9.880		-22.230		1853.420		2.545		-65.224		115.051	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.945	-20.136	138.50308	-57.0	9.7	-82.3	33.0	2.78170	0.841	-90.2	68.1	38.7	32.8	28.3	0.	1-2			
3	-10.765	-20.376	133.96069	-58.3	8.9	-81.2	32.8	2.68611	0.873	-87.5	67.8	41.0	29.3	26.1	8.96443	2-3			
4	-10.747	-19.958	139.81228	-62.3	10.1	-80.9	32.1	2.80270	0.833	-87.2	68.2	36.4	33.7	31.2	12.43906	3-4			
5	-11.138	-19.877	143.90759	-56.0	10.5	-83.5	33.2	2.88558	0.807	-93.3	68.3	36.4	36.3	30.3	12.09161	4-5			
6	-11.147	-20.311	137.69981	-51.5	9.2	-83.6	33.9	2.76036	0.847	-92.9	67.9	41.0	32.2	25.3	12.88474	5-6			
7	-10.766	-20.376	133.96069	-58.3	8.9	-81.2	32.8	2.68611	0.873	-87.5	67.8	41.0	29.3	26.1	11.51730	6-7			

JULY 31, 1964 13 HR 24 MIN 59 SEC 55 MS

TAB NO 131

ATLAS PHOTO NO 131

POD SEQUENCE NO 920

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				49.744		116.02321		-9.892		-22.205		1851.479		2.546		-65.208		115.046	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.940	-20.143	136.23983	-57.0	9.7	-82.3	33.0	2.73625	0.841	-90.2	68.1	38.7	32.8	28.3	0.	1-2			
3	-10.764	-20.379	131.77256	-58.3	8.9	-81.2	32.8	2.64223	0.873	-87.5	67.8	41.0	29.3	26.1	8.81757	2-3			
4	-10.745	-19.968	137.52703	-62.3	10.1	-80.9	32.1	2.75689	0.834	-87.2	68.2	36.4	33.7	31.1	12.23509	3-4			
5	-11.130	-19.888	141.95394	-56.0	10.5	-83.5	33.2	2.83836	0.808	-93.3	68.3	36.4	36.3	30.3	11.89344	4-5			
6	-11.132	-20.315	135.44960	-51.5	9.2	-83.6	33.9	2.71525	0.848	-92.9	67.9	41.0	32.2	25.3	12.67317	5-6			
7	-10.764	-20.379	131.77256	-58.3	8.9	-81.2	32.8	2.64223	0.873	-87.5	67.8	41.0	29.3	26.1	11.32892	6-7			

JULY 31, 1964 13 HR 24 MIN 59 SEC 895 MS

TAB NO 132

ATLAS PHOTO NO 132

POD SEQUENCE NO 921

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				48.904		114.08110		-9.903		-22.179		1849.536		2.548		-65.191		115.041	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.935	-20.150	133.97553	-57.0	9.7	-82.3	33.0	2.69077	0.841	-90.2	68.0	38.7	32.8	28.3	0.	1-2			
3	-10.762	-20.382	129.58335	-58.3	8.9	-81.2	32.8	2.59834	0.873	-87.5	67.8	41.0	29.3	26.1	8.67062	2-3			
4	-10.744	-19.978	135.24076	-62.3	10.1	-80.9	32.1	2.71106	0.834	-87.2	68.2	36.4	33.7	31.1	12.03108	3-4			
5	-11.122	-19.900	139.19931	-56.0	10.5	-83.5	33.2	2.79115	0.808	-93.3	68.3	36.4	36.3	30.3	11.69517	4-5			
6	-11.124	-20.319	133.19831	-51.5	9.2	-83.6	33.9	2.67012	0.848	-92.9	67.9	41.0	32.2	25.3	12.46156	5-6			
7	-10.762	-20.382	129.58335	-58.3	8.9	-81.2	32.8	2.59834	0.873	-87.5	67.8	41.0	29.3	26.1	11.14032	6-7			

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JULY 31, 1964 13 HR 25 MIN 0 SEC 735 MS

TAB NO 133 ATLAS PHOTO NO 133 POD SEQUENCE NO 922

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
								48.064	112.13857	-9.915	-22.153	1847.594	2.549	-65.174	115.037	
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.930	-20.157	151.71020	-57.0	9.7	-82.3	33.0	2.64527	0.841	-90.2	68.0	38.7	32.8	28.3	0.	1-2
3	-10.758	-20.385	127.39313	-58.3	8.9	-81.2	32.8	2.55442	0.873	-87.5	67.8	41.0	29.3	26.1	8.52358	2-3
4	-10.742	-19.988	132.95348	-62.3	10.1	-80.9	32.1	2.66521	0.834	-87.2	68.2	36.4	33.7	31.1	11.82702	3-4
5	-11.114	-19.911	136.84370	-56.0	10.5	-83.5	33.2	2.74342	0.808	-93.3	68.3	36.4	36.2	30.2	11.49690	4-5
6	-11.116	-20.423	130.94599	-51.5	9.2	-83.6	33.9	2.62497	0.848	-92.9	67.9	41.0	32.2	25.3	12.24989	5-6
7	-10.760	-20.385	127.39313	-58.3	8.9	-81.2	32.8	2.55442	0.873	-87.5	67.8	41.0	29.3	26.1	10.95164	6-7

JULY 31, 1964 13 HR 25 MIN 1 SEC 575 MS

TAB NO 134 ATLAS PHOTO NO 134 POD SEQUENCE NO 923

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
								47.224	110.19130	-9.927	-22.128	1845.651	2.550	-65.158	115.032	
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.920	-20.164	129.44347	-57.0	9.7	-82.3	33.0	2.59975	0.841	-90.2	68.0	38.7	32.8	28.3	0.	1-2
3	-10.758	-20.388	125.20154	-58.3	8.9	-81.2	32.8	2.51048	0.873	-87.5	67.8	41.0	29.3	26.1	8.37648	2-3
4	-10.740	-19.997	130.60479	-62.3	10.1	-80.9	32.1	2.61933	0.834	-87.2	68.2	36.4	33.6	31.1	11.62285	3-4
5	-11.106	-19.922	134.40866	-56.0	10.5	-83.5	33.2	2.63665	0.808	-93.3	68.3	36.4	36.2	30.2	11.29843	4-5
6	-11.108	-20.327	128.69229	-51.5	9.2	-83.6	33.9	2.57779	0.848	-92.9	67.9	41.0	32.2	25.3	12.03811	5-6
7	-10.758	-20.388	125.20154	-58.3	8.9	-81.2	32.8	2.51048	0.873	-87.5	67.8	41.0	29.3	26.1	10.76284	6-7

JULY 31, 1964 13 HR 25 MIN 2 SEC 415 MS

TAB NO 135 ATLAS PHOTO NO 135 POD SEQUENCE NO 924

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
								46.384	108.25160	-9.939	-22.107	1843.707	2.551	-65.141	115.027	
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.920	-20.171	127.17571	-57.0	9.7	-82.3	33.0	2.55420	0.841	-90.2	68.0	38.7	32.7	28.3	0.	1-2
3	-10.756	-20.391	123.00891	-58.3	8.9	-81.2	32.8	2.46651	0.873	-87.5	67.8	41.0	29.3	26.1	8.22929	2-3
4	-10.738	-19.907	128.37510	-62.3	10.1	-80.9	32.1	2.57343	0.834	-87.2	68.2	36.4	33.6	31.1	11.41858	3-4
5	-11.076	-19.933	132.12864	-56.0	10.5	-83.5	33.2	2.64937	0.808	-93.3	68.3	36.4	36.2	30.2	11.09996	4-5
6	-11.100	-20.331	126.43789	-51.5	9.2	-83.6	33.9	2.53459	0.848	-92.9	67.9	41.0	32.2	25.3	11.82628	5-6
7	-10.756	-20.391	123.00891	-58.3	8.9	-81.2	32.8	2.46651	0.873	-87.5	67.8	41.0	29.3	26.1	10.57404	6-7

JULY 31, 1964 13 HR 25 MIN 3 SEC 255 MS

TAB NO 136 ATLAS PHOTO NO 136 POD SEQUENCE NO 925

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
								45.544	106.30724	-9.951	-22.076	1841.763	2.552	-65.124	115.023	
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.910	-20.178	124.90663	-57.0	9.7	-82.3	33.0	2.50863	0.841	-90.2	68.0	38.7	32.7	28.3	0.	1-2
3	-10.754	-20.394	120.81499	-58.3	8.9	-81.2	32.8	2.42252	0.873	-87.5	67.8	41.0	29.3	26.1	8.08211	2-3
4	-10.747	-19.917	125.08406	-62.3	10.1	-80.8	32.1	2.52750	0.834	-87.2	68.2	36.4	33.6	31.1	11.21422	3-4
5	-11.090	-19.945	129.76928	-56.0	10.5	-83.5	33.2	2.60266	0.808	-93.3	68.3	36.4	36.2	30.2	10.90130	4-5
6	-11.092	-20.335	124.18157	-51.5	9.2	-83.6	33.9	2.48937	0.848	-92.9	67.9	41.0	32.2	25.3	11.61433	5-6
7	-10.754	-20.394	120.81499	-58.3	8.9	-81.2	32.8	2.42252	0.873	-87.5	67.8	41.0	29.3	26.1	10.38504	6-7

JULY 31, 1964 13 HR 25 MIN 4 SEC 95 MS

TAB NO 137 ATLAS PHOTO NO 137 POD SEQUENCE NO 926

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
								44.704	104.36238	-9.963	-22.050	1839.818	2.553	-65.107	115.018	
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.910	-20.185	122.63643	-57.0	9.7	-82.3	33.0	2.46304	0.841	-90.2	68.0	38.7	32.7	28.3	0.	1-2
3	-10.752	-20.397	118.61995	-58.3	8.9	-81.2	32.8	2.37850	0.873	-87.5	67.8	41.0	29.3	26.1	7.93485	2-3
4	-10.735	-19.927	123.73197	-62.3	10.1	-80.8	32.1	2.48156	0.834	-87.2	68.2	36.4	33.6	31.1	11.00980	3-4
5	-11.081	-19.956	127.40688	-56.0	10.5	-83.5	33.2	2.55473	0.808	-93.3	68.3	36.4	36.2	30.2	10.70264	4-5
6	-11.084	-20.339	121.92444	-51.5	9.2	-83.6	33.9	2.44412	0.848	-92.9	67.9	41.0	32.2	25.3	11.40235	5-6
7	-10.752	-20.397	118.61995	-58.3	8.9	-81.2	32.8	2.37850	0.873	-87.5	67.8	41.0	29.3	26.1	10.19613	6-7

JULY 31, 1964 13 HR 25 MIN 4 SEC 735 MS

TAB NO 138 ATLAS PHOTO NO 138 POD SEQUENCE NO 927

TRAJECTORY DATA								SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ	
								43.864	102.41667	-9.975	-22.025	1837.872	2.554	-65.090	115.013	
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.906	-20.192	120.36471	-57.0	9.7	-82.3	33.0	2.41741	0.841	-90.2	68.0	38.7	32.7	28.3	0.	1-2
3	-10.750	-20.400	116.42340	-58.3	8.9	-81.2	32.8	2.33446	0.874	-87.5	67.8	41.0	29.3	26.1	7.78745	2-3
4	-10.733	-19.937	121.49832	-62.3	10.1	-80.8	32.1	2.43558	0.834	-87.2	68.1	36.4	33.6	31.1	10.80526	3-4
5	-11.073	-19.967	125.06691	-56.0	10.5	-83.4	33.2	2.50737	0.808	-93.2	68.2	36.4	36.2	30.2	10.50386	4-5
6	-11.075	-20.344	119.66579	-51.6	9.2	-83.6	33.9	2.39885	0.848	-92.9	67.9	41.0	32.2	25.3	11.19023	5-6
7	-10.750	-20.400	116.42340	-58.3	8.9	-81.2	32.8	2.33446	0.874	-87.5	67.8	41.0	29.3	26.1	10.00693	6-7

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JULY 31, 1964 13 HR 25 MIN 5 SEC 775 MS TAB NO 139 ATLAS PHOTO NO 139 POD SEQUENCE NO 928

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				43.024	100.47090	-9.586	-21.999	1835.926	2.555	-65.074	115.008					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.901	-20.199	118.09241	-57.0	9.7	-82.3	33.0	2.37177	0.841	-90.2	68.0	38.7	32.7	28.3	0.	1-2
3	-10.748	-20.403	114.22626	-58.3	8.9	-81.2	32.8	2.29040	0.874	-87.5	67.8	41.0	29.3	26.1	7.64011	2-3
4	-10.732	-20.047	119.20408	-62.3	10.1	-80.8	32.1	2.38959	0.834	-87.2	68.1	36.4	33.6	31.1	10.60067	3-4
5	-11.065	-19.978	122.68440	-56.0	10.5	-83.4	33.2	2.46000	0.809	-93.2	68.2	36.4	36.2	30.2	10.30510	4-5
6	-11.067	-20.348	117.40656	-51.6	9.2	-83.6	33.8	2.35356	0.848	-92.9	67.9	41.0	32.1	25.3	10.37810	5-6
7	-10.748	-20.403	114.22626	-58.3	8.9	-81.2	32.8	2.29040	0.874	-87.5	67.8	41.0	29.3	26.1	9.81781	6-7

JULY 31, 1964 13 HR 25 MIN 6 SEC 615 MS TAB NO 140 ATLAS PHOTO NO 140 POD SEQUENCE NO 929

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				42.184	98.52415	-9.998	-21.973	1833.979	2.556	-65.057	115.003					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.896	-20.206	115.81835	-57.0	9.6	-82.3	33.0	2.32610	0.841	-90.2	68.0	38.7	32.7	28.3	0.	1-2
3	-10.746	-20.406	112.02742	-58.3	8.9	-81.2	32.8	2.24632	0.874	-87.5	67.8	41.0	29.3	26.1	7.49264	2-3
4	-10.730	-20.057	116.90812	-62.2	10.1	-80.8	32.1	2.34356	0.834	-87.2	68.1	36.4	33.6	31.1	10.39595	3-4
5	-11.057	-19.990	120.32017	-56.0	10.5	-83.4	33.2	2.41260	0.809	-93.2	68.2	36.4	36.2	30.2	10.10613	4-5
6	-11.059	-20.352	115.14562	-51.6	9.2	-83.6	33.8	2.30823	0.848	-92.9	67.9	41.0	32.1	25.3	10.76582	5-6
7	-10.746	-20.406	112.02742	-58.3	8.9	-81.2	32.8	2.24632	0.874	-87.5	67.8	41.0	29.3	26.1	9.62850	6-7

JULY 31, 1964 13 HR 25 MIN 7 SEC 455 MS TAB NO 141 ATLAS PHOTO NO 141 POD SEQUENCE NO 930

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				41.345	96.57704	-10.010	-21.947	1832.032	2.557	-65.040	114.999					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.891	-20.213	113.54337	-57.0	9.6	-82.3	33.0	2.28041	0.842	-90.2	68.0	38.7	32.7	28.2	0.	1-2
3	-10.744	-20.409	109.82766	-58.3	8.9	-81.2	32.8	2.20221	0.874	-87.5	67.8	41.0	29.3	26.1	7.34508	2-3
4	-10.728	-20.067	114.61127	-62.2	10.1	-80.8	32.1	2.29752	0.834	-87.2	68.1	36.4	33.6	31.1	10.19119	3-4
5	-11.049	-20.001	117.95505	-56.0	10.5	-83.4	33.2	2.36517	0.809	-93.2	68.2	36.4	36.1	30.2	9.90717	4-5
6	-11.051	-20.356	112.88376	-51.6	9.2	-83.6	33.8	2.26289	0.848	-92.9	67.9	41.0	32.1	25.3	10.55353	5-6
7	-10.743	-20.409	109.82766	-58.3	8.9	-81.2	32.8	2.20221	0.874	-87.5	67.8	41.0	29.3	26.1	9.43909	6-7

JULY 31, 1964 13 HR 25 MIN 8 SEC 295 MS TAB NO 142 ATLAS PHOTO NO 142 POD SEQUENCE NO 931

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				40.565	94.62901	-10.027	-21.920	1830.084	2.559	-65.023	114.994					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.885	-20.220	111.26676	-57.0	9.6	-82.3	33.0	2.23469	0.842	-90.2	68.0	38.6	32.7	28.2	0.	1-2
3	-10.741	-20.412	107.62627	-58.3	8.9	-81.2	32.8	2.15807	0.874	-87.5	67.8	41.0	29.3	26.1	7.19746	2-3
4	-10.726	-20.077	112.31275	-62.2	10.1	-80.8	32.1	2.25144	0.834	-87.2	68.1	36.4	33.6	31.0	9.98628	3-4
5	-11.040	-20.013	115.58826	-56.0	10.4	-83.4	33.2	2.31771	0.809	-93.2	68.2	36.4	36.1	30.1	9.70790	4-5
6	-11.042	-20.360	110.62027	-51.6	9.2	-83.6	33.8	2.21752	0.848	-92.9	67.9	41.0	32.1	25.2	10.34109	5-6
7	-10.741	-20.412	107.62627	-58.3	8.9	-81.2	32.8	2.15807	0.874	-87.5	67.8	41.0	29.3	26.1	9.24956	6-7

JULY 31, 1964 13 HR 25 MIN 9 SEC 135 MS TAB NO 143 ATLAS PHOTO NO 143 POD SEQUENCE NO 932

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				39.665	92.68082	-10.034	-21.894	1828.136	2.560	-65.006	114.989					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.880	-20.227	108.98941	-57.0	9.6	-82.3	33.0	2.18895	0.842	-90.2	68.0	38.6	32.7	28.2	0.	1-2
3	-10.739	-20.416	105.42416	-58.3	8.9	-81.2	32.8	2.11391	0.874	-87.5	67.8	41.0	29.3	26.1	7.04976	2-3
4	-10.724	-20.087	110.01351	-62.2	10.1	-80.8	32.1	2.20535	0.835	-87.2	68.1	36.4	33.6	31.0	9.78133	3-4
5	-11.032	-20.024	113.22080	-56.0	10.4	-83.4	33.2	2.27024	0.809	-93.2	68.2	36.4	36.1	30.1	9.50874	4-5
6	-11.034	-20.365	108.35607	-51.6	9.2	-83.6	33.8	2.17213	0.848	-92.9	67.8	41.0	32.1	25.2	10.12860	5-6
7	-10.739	-20.416	105.42416	-58.3	8.9	-81.2	32.8	2.11391	0.874	-87.5	67.8	41.0	29.3	26.1	9.06004	6-7

JULY 31, 1964 13 HR 25 MIN 9 SEC 975 MS TAB NO 144 ATLAS PHOTO NO 144 POD SEQUENCE NO 933

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				38.825	90.73175	-10.046	-21.868	1826.187	2.561	-64.989	114.984					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.875	-20.234	106.71049	-57.0	9.6	-82.3	33.0	2.14318	0.842	-90.2	68.0	38.6	32.7	28.2	0.	1-2
3	-10.737	-20.419	103.22050	-58.3	8.9	-81.2	32.8	2.06972	0.874	-87.5	67.8	41.0	29.3	26.1	6.90207	2-3
4	-10.723	-20.097	107.71272	-62.2	10.1	-80.8	32.2	2.15923	0.835	-87.2	68.1	36.4	33.6	31.0	9.57627	3-4
5	-11.024	-20.035	110.85177	-56.0	10.4	-83.4	33.2	2.22274	0.809	-93.2	68.2	36.4	36.1	30.1	9.30948	4-5
6	-11.026	-20.369	106.09031	-51.6	9.2	-83.6	33.8	2.12671	0.848	-92.9	67.8	41.0	32.1	25.2	9.91601	5-6
7	-10.737	-20.419	103.22050	-58.3	8.9	-81.2	32.8	2.06972	0.874	-87.5	67.8	41.0	29.3	26.1	8.87042	6-7

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JULY 31, 1964 13 HR 25 MIN 10 SEC 815 MS TAB NO 145 ATLAS PHOTO NO 145 POD SEQUENCE NO 934

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				37.985		88.78238		-10.058		-21.842		1824.238		2.562		-64.971		114.979	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.870	-20.242	104.43067	-57.0	9.6	-82.3	33.0	2.09739	0.842	-90.2	68.0	38.6	32.7	28.2	0.	1-2			
3	-10.735	-20.422	101.01594	-58.3	8.9	-81.2	32.8	2.02552	0.874	-87.5	67.8	41.0	29.3	26.1	6.75421	2-3			
4	-10.721	-20.107	105.41104	-62.2	10.1	-80.8	32.2	2.11309	0.835	-87.2	68.1	36.4	33.5	31.0	9.37115	3-4			
5	-11.016	-20.047	108.48187	-56.0	10.4	-83.4	33.2	2.17522	0.809	-93.2	68.2	36.4	36.1	30.1	9.11022	4-5			
6	-11.018	-20.373	103.82364	-51.6	9.2	-83.6	33.8	2.08127	0.848	-92.9	67.8	41.0	32.1	25.2	9.70338	5-6			
7	-10.735	-20.422	101.01594	-58.3	8.9	-81.2	32.8	2.02552	0.874	-87.5	67.8	41.0	29.3	26.1	8.68059	6-7			

JULY 31, 1964 13 HR 25 MIN 11 SEC 655 MS TAB NO 146 ATLAS PHOTO NO 146 POD SEQUENCE NO 935

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				37.145		86.83209		-10.071		-21.815		1822.287		2.563		-64.954		114.974	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.865	-20.249	102.14924	-57.0	9.6	-82.3	33.0	2.05157	0.842	-90.2	67.9	38.6	32.7	28.2	0.	1-2			
3	-10.733	-20.425	98.80979	-58.3	8.9	-81.2	32.8	1.98128	0.874	-87.5	67.8	41.0	29.3	26.1	6.60636	2-3			
4	-10.719	-20.118	103.10773	-62.2	10.1	-80.8	32.2	2.06692	0.835	-87.2	68.1	36.4	33.5	31.0	9.16589	3-4			
5	-11.007	-20.058	106.11035	-56.0	10.4	-83.4	33.2	2.12767	0.810	-93.2	68.1	36.4	36.1	30.1	8.91065	4-5			
6	-11.009	-20.378	101.55538	-51.6	9.2	-83.6	33.8	2.03580	0.848	-92.9	67.8	41.0	32.1	25.2	9.49062	5-6			
7	-10.733	-20.425	98.80979	-58.3	8.9	-81.2	32.8	1.98128	0.874	-87.5	67.8	41.0	29.3	26.1	8.49076	6-7			

JULY 31, 1964 13 HR 25 MIN 12 SEC 495 MS TAB NO 147 ATLAS PHOTO NO 147 POD SEQUENCE NO 936

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				36.305		84.88152		-10.083		-21.789		1820.337		2.564		-64.937		114.970	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.860	-20.256	99.86691	-57.0	9.6	-82.3	33.0	2.00573	0.842	-90.2	67.9	38.6	32.7	28.2	0.	1-2			
3	-10.731	-20.429	96.60275	-58.3	8.9	-81.2	32.8	1.93703	0.874	-87.5	67.8	41.0	29.3	26.1	6.45843	2-3			
4	-10.717	-20.128	100.80355	-62.2	10.1	-80.8	32.2	2.02073	0.835	-87.2	68.1	36.4	33.5	31.0	8.96058	3-4			
5	-10.999	-20.070	103.73796	-56.0	10.4	-83.4	33.2	2.08010	0.810	-93.2	68.1	36.4	36.1	30.1	8.71109	4-5			
6	-11.001	-20.382	99.28622	-51.6	9.2	-83.6	33.8	1.99031	0.849	-92.9	67.8	41.0	32.1	25.2	9.27782	5-6			
7	-10.731	-20.429	96.60275	-58.3	8.9	-81.2	32.8	1.93703	0.874	-87.5	67.8	41.0	29.3	26.1	8.30082	6-7			

JULY 31, 1964 13 HR 25 MIN 13 SEC 335 MS TAB NO 148 ATLAS PHOTO NO 148 POD SEQUENCE NO 937

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				35.465		82.93019		-10.095		-21.763		1818.385		2.565		-64.920		114.965	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.855	-20.263	97.58315	-57.0	9.6	-82.3	33.0	1.95986	0.842	-90.2	67.9	38.6	32.6	28.2	0.	1-2			
3	-10.729	-20.432	94.39431	-58.3	8.9	-81.2	32.8	1.89274	0.874	-87.5	67.8	41.0	29.3	26.1	6.31039	2-3			
4	-10.715	-20.138	98.49795	-62.2	10.0	-80.8	32.2	1.97451	0.835	-87.2	68.0	36.4	33.5	31.0	8.75518	3-4			
5	-10.991	-20.081	101.36418	-56.0	10.4	-83.4	33.1	2.03250	0.810	-93.2	68.1	36.4	36.1	30.1	8.51143	4-5			
6	-10.993	-20.386	97.01567	-51.6	9.2	-83.6	33.8	1.94480	0.849	-92.9	67.8	41.0	32.1	25.2	9.06491	5-6			
7	-10.729	-20.432	94.39431	-58.3	8.9	-81.2	32.8	1.89274	0.874	-87.5	67.8	41.0	29.3	26.1	8.11069	6-7			

JULY 31, 1964 13 HR 25 MIN 14 SEC 174 MS TAB NO 149 ATLAS PHOTO NO 149 POD SEQUENCE NO 938

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				34.625		80.97845		-10.107		-21.736		1816.434		2.566		-64.903		114.960	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.850	-20.270	95.29620	-57.0	9.6	-82.3	33.0	1.91397	0.842	-90.2	67.9	38.6	32.6	28.2	0.	1-2			
3	-10.727	-20.435	92.18468	-58.3	8.9	-81.2	32.8	1.84844	0.874	-87.5	67.8	41.0	29.3	26.1	6.16236	2-3			
4	-10.714	-20.148	96.19114	-62.2	10.0	-80.8	32.2	1.92827	0.835	-87.2	68.0	36.4	33.5	31.0	8.54966	3-4			
5	-10.983	-20.093	98.98920	-56.0	10.4	-83.4	33.1	1.98488	0.810	-93.2	68.1	36.4	36.0	30.1	8.31177	4-5			
6	-10.984	-20.391	94.74394	-51.6	9.2	-83.6	33.8	1.89926	0.849	-92.9	67.8	41.0	32.1	25.2	8.85191	5-6			
7	-10.727	-20.435	92.18468	-58.3	8.9	-81.2	32.8	1.84844	0.874	-87.5	67.8	41.0	29.3	26.1	7.92065	6-7			

JULY 31, 1964 13 HR 25 MIN 15 SEC 14 MS TAB NO 150 ATLAS PHOTO NO 150 POD SEQUENCE NO 939

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				33.785		79.02585		-10.119		-21.709		1814.481		2.568		-64.885		114.955	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.845	-20.278	93.01146	-57.0	9.6	-82.3	33.0	1.86605	0.842	-90.2	67.9	38.6	32.6	28.2	0.	1-2			
3	-10.724	-20.438	89.97333	-58.3	8.9	-81.1	32.8	1.80410	0.874	-87.5	67.7	41.0	29.3	26.1	6.01411	2-3			
4	-10.712	-20.158	93.88253	-62.2	10.0	-80.8	32.2	1.88199	0.835	-87.2	68.0	36.4	33.5	31.0	8.34399	3-4			
5	-10.974	-20.105	96.61241	-56.0	10.4	-83.4	33.1	1.93722	0.810	-93.2	68.1	36.4	36.0	30.1	8.11190	4-5			
6	-10.976	-20.395	92.47046	-51.6	9.2	-83.6	33.8	1.85369	0.849	-92.9	67.8	41.0	32.1	25.2	8.63876	5-6			
7	-10.724	-20.438	89.97333	-58.3	8.9	-81.1	32.8	1.80410	0.874	-87.5	67.7	41.0	29.3	26.1	7.73029	6-7			

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JULY 31, 1964 13 HR 25 MIN 15 SEC 854 MS TAB NO 151 ATLAS PHOTO NO 151 POD SEQUENCE NO 940

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				32.945	77.07300	-10.131	-21.683	1812.528	2.569	-64.868	114.950		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.840	-20.285	30.72391	-57.0	9.6	-82.2	33.0	1.82210	0.842	-90.2	67.9 38.6 32.6	28.2	0.
3	-10.722	-20.442	87.76116	-58.3	8.9	-81.1	32.8	1.75974	0.874	-87.5	67.7 41.0 29.3	26.1	5.86591
4	-10.710	-20.169	91.57314	-62.2	10.0	-80.8	32.2	1.83570	0.835	-87.2	68.0 36.4 33.5	31.0	8.13827
5	-10.966	-20.116	94.23485	-56.0	10.4	-83.4	33.1	1.88955	0.810	-93.2	68.1 36.4 36.0	30.0	7.91193
6	-10.968	-20.400	90.19620	-51.7	9.2	-83.6	33.7	1.80810	0.849	-92.9	67.8 41.0 32.1	25.2	8.42557
7	-10.722	-20.442	87.76116	-58.3	8.9	-81.1	32.8	1.75974	0.874	-87.5	67.7 41.0 29.3	26.1	7.54014

JULY 31, 1964 13 HR 25 MIN 16 SEC 694 MS TAB NO 152 ATLAS PHOTO NO 152 POD SEQUENCE NO 941

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				32.105	75.11913	-10.144	-21.656	1810.574	2.570	-64.851	114.945		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.835	-20.292	88.43463	-57.0	9.6	-82.2	33.0	1.77613	0.842	-90.2	67.9 38.6 32.6	28.2	0.
3	-10.720	-20.445	85.54728	-58.3	8.9	-81.1	32.8	1.71535	0.874	-87.5	67.7 41.0 29.3	26.1	5.71754
4	-10.708	-20.179	89.26200	-62.2	10.0	-80.8	32.2	1.78937	0.835	-87.2	68.0 36.4 33.5	30.9	7.93242
5	-10.958	-20.128	91.85555	-56.0	10.4	-83.4	33.1	1.84184	0.810	-93.2	68.1 36.4 36.0	30.0	7.71186
6	-10.959	-20.404	87.92017	-51.7	9.2	-83.6	33.7	1.76247	0.849	-92.9	67.8 41.0 32.1	25.2	8.21224
7	-10.720	-20.445	85.54728	-58.3	8.9	-81.1	32.8	1.71535	0.874	-87.5	67.7 41.0 29.3	26.1	7.34945

JULY 31, 1964 13 HR 25 MIN 17 SEC 534 MS TAB NO 153 ATLAS PHOTO NO 153 POD SEQUENCE NO 942

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				31.265	75.16513	-10.156	-21.629	1808.620	2.571	-64.833	114.940		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.830	-20.300	86.14468	-57.0	9.6	-82.2	33.0	1.73013	0.842	-90.2	67.9 38.6 32.6	28.2	0.
3	-10.718	-20.449	83.33272	-58.3	8.9	-81.1	32.8	1.67094	0.874	-87.5	67.7 41.0 29.3	26.0	5.56926
4	-10.706	-20.189	86.95020	-62.2	10.0	-80.8	32.2	1.74302	0.835	-87.2	68.0 36.4 33.5	30.9	7.72654
5	-10.949	-20.139	89.47561	-56.0	10.4	-83.4	33.1	1.79412	0.810	-93.2	68.1 36.4 36.0	30.0	7.51180
6	-10.951	-20.408	85.64350	-51.7	9.2	-83.6	33.7	1.71683	0.849	-92.9	67.8 41.0 32.0	25.2	7.99889
7	-10.718	-20.449	83.33272	-58.3	8.9	-81.1	32.8	1.67094	0.874	-87.5	67.7 41.0 29.3	26.0	7.15913

JULY 31, 1964 13 HR 25 MIN 18 SEC 374 MS TAB NO 154 ATLAS PHOTO NO 154 POD SEQUENCE NO 943

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				30.425	71.21021	-10.168	-21.602	1806.665	2.572	-64.816	114.935		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.824	-20.307	83.85305	-57.0	9.6	-82.2	33.0	1.68411	0.842	-90.2	67.9 38.6 32.6	28.2	0.
3	-10.716	-20.452	81.11652	-58.3	8.9	-81.1	32.8	1.62651	0.874	-87.5	67.7 41.0 29.2	26.0	5.42074
4	-10.704	-20.200	84.63675	-62.2	10.0	-80.8	32.2	1.69665	0.836	-87.2	68.0 36.4 33.5	30.9	7.52054
5	-10.941	-20.151	87.09404	-56.0	10.4	-83.4	33.1	1.74636	0.811	-93.2	68.1 36.4 36.0	30.0	7.31163
6	-10.943	-20.413	83.36518	-51.7	9.2	-83.6	33.7	1.67116	0.849	-92.9	67.8 41.0 32.0	25.2	7.78543
7	-10.716	-20.452	81.11652	-58.3	8.9	-81.1	32.8	1.62651	0.874	-87.5	67.7 41.0 29.2	26.0	6.96837

JULY 31, 1964 13 HR 25 MIN 19 SEC 214 MS TAB NO 155 ATLAS PHOTO NO 155 POD SEQUENCE NO 944

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				29.585	69.25493	-10.180	-21.576	1804.710	2.573	-64.799	114.930		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.819	-20.315	81.56051	-57.0	9.6	-82.2	33.0	1.63807	0.843	-90.2	67.9 38.6 32.6	28.1	0.
3	-10.714	-20.455	78.89938	-58.3	8.9	-81.1	32.8	1.58205	0.874	-87.5	67.7 41.0 29.2	26.0	5.27233
4	-10.703	-20.210	82.32237	-62.2	10.0	-80.8	32.2	1.65025	0.836	-87.2	68.0 36.4 33.5	30.9	7.31446
5	-10.933	-20.163	84.71156	-56.0	10.4	-83.4	33.1	1.69859	0.811	-93.2	68.0 36.4 36.0	30.0	7.11127
6	-10.934	-20.417	81.08594	-51.7	9.2	-83.6	33.7	1.62547	0.849	-92.9	67.8 41.0 32.0	25.2	7.57191
7	-10.714	-20.455	78.89938	-58.3	8.9	-81.1	32.8	1.58205	0.874	-87.5	67.7 41.0 29.2	26.0	6.77781

JULY 31, 1964 13 HR 25 MIN 20 SEC 54 MS TAB NO 156 ATLAS PHOTO NO 156 POD SEQUENCE NO 945

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ		
				28.745	67.29684	-10.193	-21.549	1802.754	2.574	-64.781	114.925		
PHOTO DATA													
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.814	-20.322	79.26645	-57.0	9.6	-82.2	33.0	1.59159	0.843	-90.2	67.9 38.6 32.6	28.1	0.
3	-10.711	-20.459	76.68076	-58.3	8.9	-81.1	32.8	1.53756	0.874	-87.5	67.7 41.0 29.2	26.0	5.12373
4	-10.701	-20.220	80.00649	-62.2	10.0	-80.8	32.2	1.60383	0.836	-87.2	68.0 36.4 33.4	30.9	7.10829
5	-10.924	-20.175	82.32759	-56.0	10.4	-83.4	33.1	1.65079	0.811	-93.2	68.0 36.4 35.9	30.0	6.91101
6	-10.926	-20.422	78.80519	-51.7	9.2	-83.6	33.7	1.57975	0.849	-92.9	67.8 41.0 32.0	25.2	7.35829
7	-10.711	-20.459	76.68076	-58.3	8.9	-81.1	32.8	1.53756	0.874	-87.5	67.7 41.0 29.2	26.0	6.58685

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JULY 31, 1964 13 HR 25 MIN 20 SEC 894 MS TAB NO 157 ATLAS PHOTO NO 157 POD SEQUENCE NO 946

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				27.905		65.34235		-10.205		-21.522		1800.798		2.576		-64.764		114.920	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.807	-20.329	76.97138	-57.0	9.6	-82.2	33.0	1.54590	0.843	-90.2	67.9	38.6	32.6	28.1	0.	1-2			
3	-10.709	-20.462	74.46112	-58.3	8.9	-81.1	32.8	1.49306	0.874	-87.5	67.7	41.0	29.2	26.0	4.97510	2-3			
4	-10.699	-20.231	77.66363	-62.2	10.0	-80.8	32.3	1.55739	0.836	-87.2	67.9	36.4	33.4	30.9	6.90204	3-4			
5	-10.916	-20.186	79.94264	-56.0	10.4	-83.4	33.1	1.60297	0.811	-93.2	68.0	36.4	35.9	30.0	6.71055	4-5			
6	-10.917	-20.427	76.52344	-51.7	9.2	-83.6	33.7	1.53461	0.849	-92.9	67.8	41.0	32.0	25.2	7.14463	5-6			
7	-10.709	-20.462	74.46112	-58.3	8.9	-81.1	32.8	1.49306	0.874	-87.5	67.7	41.0	29.2	26.0	6.39608	6-7			

JULY 31, 1964 13 HR 25 MIN 21 SEC 734 MS TAB NO 158 ATLAS PHOTO NO 158 POD SEQUENCE NO 947

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				27.065		63.38518		-10.217		-21.495		1798.840		2.577		-64.746		114.915	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.804	-20.337	74.67494	-57.0	9.6	-82.2	33.0	1.49978	0.843	-90.2	67.9	38.6	32.6	28.1	0.	1-2			
3	-10.707	-20.466	72.24014	-58.3	8.9	-81.1	32.8	1.44852	0.874	-87.5	67.7	41.0	29.2	26.0	4.82637	2-3			
4	-10.697	-20.241	75.37141	-62.2	10.0	-80.8	32.3	1.51091	0.836	-87.2	67.9	36.4	33.4	30.9	6.49569	3-4			
5	-10.908	-20.198	77.55634	-56.0	10.4	-83.4	33.1	1.55512	0.811	-93.2	68.0	36.4	35.9	30.0	6.50989	4-5			
6	-10.909	-20.431	74.24035	-51.7	9.2	-83.6	33.7	1.48824	0.849	-92.9	67.8	41.0	32.0	25.2	6.93085	5-6			
7	-10.707	-20.466	72.24014	-58.3	8.9	-81.1	32.8	1.44852	0.874	-87.5	67.7	41.0	29.2	26.0	6.20502	6-7			

JULY 31, 1964 13 HR 25 MIN 22 SEC 574 MS TAB NO 159 ATLAS PHOTO NO 159 POD SEQUENCE NO 948

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				26.225		61.42752		-10.230		-21.467		1796.883		2.578		-64.728		114.910	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.790	-20.344	72.37742	-57.0	9.6	-82.2	33.0	1.45363	0.843	-90.2	67.8	38.6	32.6	28.1	0.	1-2			
3	-10.705	-20.469	70.01807	-58.3	8.9	-81.1	32.8	1.40397	0.874	-87.4	67.7	41.0	29.2	26.0	4.67761	2-3			
4	-10.695	-20.252	73.05211	-62.1	10.0	-80.8	32.3	1.46442	0.836	-87.2	67.9	36.4	33.4	30.9	6.48928	3-4			
5	-10.899	-20.210	75.16900	-56.0	10.4	-83.4	33.1	1.50725	0.811	-93.2	68.0	36.4	35.9	30.0	6.30933	4-5			
6	-10.901	-20.436	71.95618	-51.7	9.2	-83.6	33.7	1.44245	0.849	-92.9	67.8	41.0	32.0	25.2	6.71703	5-6			
7	-10.705	-20.469	70.01807	-58.3	8.9	-81.1	32.8	1.40397	0.874	-87.4	67.7	41.0	29.2	26.0	6.01395	6-7			

JULY 31, 1964 13 HR 25 MIN 23 SEC 414 MS TAB NO 160 ATLAS PHOTO NO 160 POD SEQUENCE NO 949

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				25.385		59.46506		-10.242		-21.440		1794.924		2.579		-64.711		114.904	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.793	-20.352	70.07838	-57.0	9.6	-82.2	33.0	1.40746	0.843	-90.2	67.8	38.6	32.5	28.1	0.	1-2			
3	-10.703	-20.473	67.79449	-58.3	8.9	-81.1	32.8	1.35938	0.874	-87.4	67.7	41.0	29.2	26.0	4.52878	2-3			
4	-10.693	-20.262	70.73129	-62.1	10.0	-80.8	32.3	1.41790	0.836	-87.2	67.9	36.4	33.4	30.9	6.28276	3-4			
5	-10.891	-20.222	72.78014	-56.0	10.4	-83.4	33.1	1.45935	0.811	-93.2	68.0	36.4	35.9	29.9	6.10857	4-5			
6	-10.892	-20.440	69.67047	-51.7	9.2	-83.6	33.7	1.39663	0.849	-92.9	67.8	41.0	32.0	25.2	6.50309	5-6			
7	-10.703	-20.473	67.79449	-58.3	8.9	-81.1	32.8	1.35938	0.874	-87.4	67.7	41.0	29.2	26.0	5.82277	6-7			

JULY 31, 1964 13 HR 25 MIN 24 SEC 254 MS TAB NO 161 ATLAS PHOTO NO 161 POD SEQUENCE NO 950

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				24.546		57.51024		-10.255		-21.413		1792.966		2.580		-64.693		114.899	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.788	-20.359	67.77836	-57.0	9.6	-82.2	33.0	1.36126	0.843	-90.2	67.8	38.6	32.5	28.1	0.	1-2			
3	-10.700	-20.476	65.56996	-58.3	8.9	-81.1	32.8	1.31477	0.874	-87.4	67.7	41.0	29.2	26.0	4.37993	2-3			
4	-10.691	-20.272	68.40953	-62.1	10.0	-80.8	32.3	1.37136	0.836	-87.2	67.9	36.4	33.4	30.9	6.07616	3-4			
5	-10.882	-20.233	70.39035	-56.0	10.3	-83.4	33.1	1.41143	0.812	-93.2	68.0	36.4	35.9	29.9	5.90772	4-5			
6	-10.884	-20.445	67.38381	-51.7	9.1	-83.6	33.7	1.35079	0.850	-92.9	67.8	41.0	32.0	25.2	6.28909	5-6			
7	-10.700	-20.476	65.56996	-58.3	8.9	-81.1	32.8	1.31477	0.874	-87.4	67.7	41.0	29.2	26.0	5.63149	6-7			

JULY 31, 1964 13 HR 25 MIN 25 SEC 94 MS TAB NO 162 ATLAS PHOTO NO 162 POD SEQUENCE NO 951

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
				23.706		55.55057		-10.267		-21.386		1791.006		2.581		-64.675		114.894	
PHOTO DATA																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.783	-20.367	65.47683	-57.0	9.6	-82.2	33.0	1.31504	0.843	-90.2	67.8	38.6	32.5	28.1	0.	1-2			
3	-10.698	-20.480	63.34390	-58.3	8.9	-81.1	32.8	1.27014	0.874	-87.4	67.7	41.0	29.2	26.0	4.23097	2-3			
4	-10.689	-20.283	66.08423	-62.1	10.0	-80.8	32.3	1.32478	0.836	-87.2	67.9	36.4	33.4	30.8	5.86946	3-4			
5	-10.874	-20.245	67.99903	-56.0	10.3	-83.4	33.1	1.36348	0.812	-93.2	68.0	36.4	35.9	29.9	5.70686	4-5			
6	-10.875	-20.450	65.09565	-51.7	9.1	-83.6	33.7	1.30493	0.850	-92.9	67.8	41.0	32.0	25.2	6.07499	5-6			
7	-10.698	-20.480	63.34390	-58.3	8.9	-81.1	32.8	1.27014	0.874	-87.4	67.7	41.0	29.2	26.0	5.44011	6-7			

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JULY 31, 1964 13 HR 25 MIN 25 SEC 934 MS TAB NO 163 ATLAS PHOTO NO 163 POD SEQUENCE NO 952

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				22.866	53.59071	-10.280	-21.358	1789.046	2.582	-64.658	114.889		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.778	-20.374	63.17449	-57.0	9.6	-82.2	33.0	1.26880	0.843	-90.2	67.8 38.6 32.5 28.1	0.	1- 2
3	-10.696	-20.484	61.11704	-58.2	8.9	-81.1	32.8	1.22549	0.874	-87.4	67.7 41.0 29.2 26.0	4.08194	2- 3
4	-10.687	-20.293	63.76217	-62.1	10.0	-80.8	32.3	1.27819	0.836	-87.2	67.9 36.4 33.4 30.8	5.66271	3- 4
5	-10.865	-20.257	65.60696	-56.0	10.3	-83.4	33.1	1.31552	0.812	-93.2	67.9 36.4 35.8 29.9	5.50581	4- 5
6	-10.867	-20.454	62.80669	-51.7	9.1	-83.6	33.6	1.25904	0.850	-92.9	67.7 41.0 32.0 25.2	5.86087	5- 6
7	-10.696	-20.484	61.11704	-58.2	8.9	-81.1	32.8	1.22549	0.874	-87.4	67.7 41.0 29.2 26.0	5.24863	6- 7

JULY 31, 1964 13 HR 25 MIN 26 SEC 774 MS TAB NO 164 ATLAS PHOTO NO 164 POD SEQUENCE NO 953

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				22.026	51.62988	-10.292	-21.331	1787.085	2.584	-64.640	114.884		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.772	-20.382	60.87047	-57.0	9.6	-82.2	33.0	1.22252	0.843	-90.2	67.8 38.6 32.5 28.1	0.	1- 2
3	-10.694	-20.487	58.88850	-58.2	8.9	-81.1	32.8	1.18080	0.874	-87.4	67.7 41.0 29.2 26.0	3.93290	2- 3
4	-10.685	-20.304	61.43641	-62.1	10.0	-80.8	32.3	1.23157	0.837	-87.2	67.9 36.4 33.4 30.8	5.45584	3- 4
5	-10.857	-20.269	63.21323	-56.0	10.3	-83.4	33.1	1.26752	0.812	-93.2	67.9 36.4 35.8 29.9	5.30476	4- 5
6	-10.858	-20.459	60.51606	-51.7	9.1	-83.6	33.6	1.21312	0.850	-92.9	67.7 41.0 32.0 25.2	5.64661	5- 6
7	-10.694	-20.487	58.88850	-58.2	8.9	-81.1	32.8	1.18080	0.874	-87.4	67.7 41.0 29.2 26.0	5.05715	6- 7

JULY 31, 1964 13 HR 25 MIN 27 SEC 614 MS TAB NO 165 ATLAS PHOTO NO 165 POD SEQUENCE NO 954

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				21.186	49.66862	-10.305	-21.303	1785.124	2.585	-64.622	114.879		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.767	-20.390	58.56535	-57.0	9.6	-82.2	33.0	1.17623	0.843	-90.2	67.8 38.6 32.5 28.1	0.	1- 2
3	-10.691	-20.491	56.65691	-58.2	8.9	-81.1	32.8	1.13609	0.874	-87.4	67.7 41.0 29.2 26.0	3.78372	2- 3
4	-10.683	-20.315	59.10958	-62.1	10.0	-80.8	32.3	1.18493	0.837	-87.2	67.9 36.4 33.4 30.8	5.24892	3- 4
5	-10.848	-20.281	60.81846	-56.0	10.3	-83.4	33.1	1.21950	0.812	-93.2	67.9 36.4 35.8 29.9	5.10371	4- 5
6	-10.850	-20.464	58.22435	-51.7	9.1	-83.6	33.6	1.16718	0.850	-92.9	67.7 41.0 32.0 25.2	5.64321	5- 6
7	-10.691	-20.491	56.65691	-58.2	8.9	-81.1	32.8	1.13609	0.874	-87.4	67.7 41.0 29.2 26.0	4.86557	6- 7

JULY 31, 1964 13 HR 25 MIN 28 SEC 454 MS TAB NO 166 ATLAS PHOTO NO 166 POD SEQUENCE NO 955

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				20.346	47.70663	-10.317	-21.276	1783.162	2.586	-64.604	114.874		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.762	-20.397	56.25885	-57.0	9.6	-82.2	33.0	1.12951	0.843	-90.2	67.8 38.6 32.5 28.1	0.	1- 2
3	-10.689	-20.494	54.42792	-58.2	8.9	-81.1	32.8	1.09136	0.874	-87.4	67.7 41.0 29.2 26.0	3.63447	2- 3
4	-10.681	-20.325	56.78138	-62.1	10.0	-80.8	32.3	1.13825	0.837	-87.2	67.9 36.4 33.3 30.8	5.04186	3- 4
5	-10.840	-20.293	58.42229	-56.0	10.3	-83.4	33.1	1.17145	0.812	-93.2	67.9 36.4 35.8 29.9	4.90236	4- 5
6	-10.841	-20.468	55.93125	-51.8	9.1	-83.6	33.6	1.12121	0.850	-92.9	67.7 41.0 31.9 25.2	5.21789	5- 6
7	-10.689	-20.494	54.42792	-58.2	8.9	-81.1	32.8	1.09136	0.874	-87.4	67.7 41.0 29.2 26.0	4.67368	6- 7

JULY 31, 1964 13 HR 25 MIN 29 SEC 294 MS TAB NO 167 ATLAS PHOTO NO 167 POD SEQUENCE NO 956

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				19.506	45.74422	-10.330	-21.248	1781.200	2.587	-64.586	114.868		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.756	-20.405	53.95134	-57.0	9.6	-82.2	33.0	1.08356	0.844	-90.2	67.8 38.6 32.5 28.1	0.	1- 2
3	-10.687	-20.498	52.19588	-58.2	8.9	-81.1	32.8	1.04660	0.874	-87.4	67.7 41.0 29.2 26.0	3.48527	2- 3
4	-10.679	-20.336	54.45211	-62.1	10.0	-80.8	32.3	1.09156	0.837	-87.2	67.8 36.4 33.3 30.8	4.83474	3- 4
5	-10.831	-20.305	56.02514	-56.0	10.3	-83.4	33.1	1.12339	0.812	-93.2	67.9 36.4 35.8 29.9	4.70102	4- 5
6	-10.833	-20.473	53.63717	-51.8	9.1	-83.6	33.6	1.07523	0.850	-92.9	67.7 41.0 31.9 25.2	5.00341	5- 6
7	-10.687	-20.498	52.19588	-58.2	8.9	-81.1	32.8	1.04660	0.874	-87.4	67.7 41.0 29.2 26.0	4.48189	6- 7

JULY 31, 1964 13 HR 25 MIN 30 SEC 134 MS TAB NO 168 ATLAS PHOTO NO 168 POD SEQUENCE NO 957

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				18.666	43.78101	-10.343	-21.220	1779.236	2.588	-64.569	114.863		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.751	-20.413	51.64236	-57.0	9.6	-82.2	33.0	1.03719	0.844	-90.2	67.8 38.6 32.5 28.1	0.	1- 2
3	-10.684	-20.502	49.96242	-58.2	8.9	-81.1	32.8	1.00182	0.874	-87.4	67.7 41.0 29.2 26.0	3.33590	2- 3
4	-10.677	-20.346	52.12139	-62.1	10.0	-80.8	32.3	1.04484	0.837	-87.2	67.8 36.4 33.3 30.8	4.62751	3- 4
5	-10.823	-20.317	53.62660	-56.0	10.3	-83.4	33.1	1.07529	0.813	-93.2	67.9 36.4 35.8 29.8	4.49968	4- 5
6	-10.824	-20.478	51.34171	-51.8	9.1	-83.6	33.6	1.02921	0.850	-92.9	67.7 41.0 31.9 25.1	4.78884	5- 6
7	-10.684	-20.502	49.96242	-58.2	8.9	-81.1	32.8	1.00182	0.874	-87.4	67.7 41.0 29.2 26.0	4.29011	6- 7

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JULY 31, 1964 13 HR 25 MIN 30 SEC 974 MS TAB NO 169 ATLAS PHOTO NO 169 POD SEQUENCE NO 958

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				17.826		41.81725		-10.355		-21.193		1777.273		2.590		-64.551		114.858	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.746	-20.420	49.33217	-57.0	9.6	-82.2	33.0	0.99079	0.844	-90.2	67.8	38.6	32.5	28.0	0.	1-2			
3	-10.682	-20.505	47.72773	-58.2	8.9	-81.1	32.8	0.95701	0.874	-87.4	67.7	41.0	29.2	26.0	3.18655	2-3			
4	-10.675	-20.357	49.78948	-62.1	10.0	-80.8	32.3	0.99809	0.837	-87.2	67.8	36.4	33.3	30.8	4.42020	3-4			
5	-10.814	-20.329	51.22685	-56.0	10.3	-83.4	33.1	1.02717	0.813	-93.2	67.9	36.4	35.8	29.8	4.29815	4-5			
6	-10.815	-20.482	49.04500	-51.8	9.1	-83.6	33.6	0.98317	0.850	-92.9	67.7	41.0	31.9	25.1	4.57419	5-6			
7	-10.682	-20.505	47.72773	-58.2	8.9	-81.1	32.8	0.95701	0.874	-87.4	67.7	41.0	29.2	26.0	4.09802	6-7			

JULY 31, 1964 13 HR 25 MIN 31 SEC 813 MS TAB NO 170 ATLAS PHOTO NO 170 POD SEQUENCE NO 959

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				16.986		39.85294		-10.368		-21.165		1775.308		2.591		-64.533		114.853	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.741	-20.428	47.02078	-57.0	9.6	-82.2	33.0	0.94437	0.844	-90.2	67.8	38.6	32.5	28.0	0.	1-2			
3	-10.680	-20.509	49.49187	-58.2	8.9	-81.1	32.8	0.91218	0.874	-87.4	67.7	41.0	29.2	26.0	3.03699	2-3			
4	-10.673	-20.368	47.45637	-62.1	10.0	-80.8	32.4	0.95132	0.837	-87.2	67.8	36.4	33.3	30.8	4.21279	3-4			
5	-10.806	-20.341	48.82594	-56.0	10.3	-83.4	33.1	0.97903	0.813	-93.2	67.9	36.4	35.8	29.8	4.09661	4-5			
6	-10.807	-20.487	46.74712	-51.8	9.1	-83.6	33.6	0.93711	0.850	-92.9	67.7	41.0	31.9	25.1	4.35946	5-6			
7	-10.680	-20.509	49.49187	-58.2	8.9	-81.1	32.8	0.91218	0.874	-87.4	67.7	41.0	29.2	26.0	3.90593	6-7			

JULY 31, 1964 13 HR 25 MIN 32 SEC 653 MS TAB NO 171 ATLAS PHOTO NO 171 POD SEQUENCE NO 960

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				16.146		37.88795		-10.381		-21.137		1773.343		2.592		-64.515		114.847	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.735	-20.436	44.70802	-57.0	9.6	-82.2	33.0	0.89792	0.844	-90.2	67.8	38.6	32.5	28.0	0.	1-2			
3	-10.677	-20.513	43.25462	-58.2	8.9	-81.1	32.8	0.86732	0.874	-87.4	67.7	41.0	29.2	26.0	2.88751	2-3			
4	-10.671	-20.378	45.12189	-62.1	10.0	-80.8	32.4	0.90453	0.837	-87.2	67.8	36.4	33.3	30.7	4.00530	3-4			
5	-10.797	-20.353	46.42367	-56.0	10.3	-83.4	33.1	0.93086	0.813	-93.2	67.8	36.4	35.7	29.8	3.89489	4-5			
6	-10.798	-20.492	44.44784	-51.8	9.1	-83.6	33.6	0.89101	0.850	-92.9	67.7	41.0	31.9	25.1	4.14467	5-6			
7	-10.677	-20.513	43.25462	-58.2	8.9	-81.1	32.8	0.86732	0.874	-87.4	67.7	41.0	29.2	26.0	3.71374	6-7			

JULY 31, 1964 13 HR 25 MIN 33 SEC 493 MS TAB NO 172 ATLAS PHOTO NO 172 POD SEQUENCE NO 961

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				15.306		35.92255		-10.393		-21.109		1771.378		2.593		-64.497		114.842	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.730	-20.443	42.39414	-57.0	9.6	-82.2	33.0	0.85145	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.675	-20.517	41.01629	-58.2	8.9	-81.1	32.8	0.82244	0.874	-87.4	67.7	41.0	29.2	26.0	2.73787	2-3			
4	-10.659	-20.389	42.78635	-62.1	10.0	-80.7	32.4	0.85771	0.837	-87.2	67.8	36.4	33.3	30.7	3.79776	3-4			
5	-10.789	-20.365	44.02032	-56.0	10.3	-83.4	33.1	0.88267	0.813	-93.2	67.8	36.4	35.7	29.8	3.69315	4-5			
6	-10.790	-20.497	42.14747	-51.8	9.1	-83.6	33.6	0.84490	0.850	-92.9	67.7	41.0	31.9	25.1	3.92980	5-6			
7	-10.675	-20.517	41.01629	-58.2	8.9	-81.1	32.8	0.82244	0.874	-87.4	67.7	41.0	29.2	26.0	3.52144	6-7			

JULY 31, 1964 13 HR 25 MIN 34 SEC 333 MS TAB NO 173 ATLAS PHOTO NO 173 POD SEQUENCE NO 962

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				14.466		33.95647		-10.406		-21.081		1769.412		2.594		-64.478		114.837	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.725	-20.451	40.07892	-57.0	9.6	-82.2	33.0	0.80495	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.673	-20.520	38.77661	-58.2	8.9	-81.1	32.9	0.77753	0.874	-87.4	67.7	41.0	29.2	26.0	2.58823	2-3			
4	-10.667	-20.400	40.44946	-62.1	10.0	-80.7	32.4	0.81086	0.837	-87.2	67.8	36.4	33.3	30.7	3.59009	3-4			
5	-10.780	-20.377	41.61566	-56.0	10.3	-83.4	33.1	0.83445	0.813	-93.2	67.8	36.4	35.7	29.8	3.49131	4-5			
6	-10.781	-20.502	39.84578	-51.8	9.1	-83.6	33.6	0.79876	0.850	-92.9	67.7	41.0	31.9	25.1	3.71483	5-6			
7	-10.673	-20.520	38.77661	-58.2	8.9	-81.1	32.9	0.77753	0.874	-87.4	67.7	41.0	29.2	26.0	3.32914	6-7			

JULY 31, 1964 13 HR 25 MIN 35 SEC 173 MS TAB NO 174 ATLAS PHOTO NO 174 POD SEQUENCE NO 963

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				13.626		31.98979		-10.419		-21.053		1767.445		2.595		-64.460		114.831	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.719	-20.459	37.76244	-57.0	9.6	-82.2	33.0	0.75842	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.670	-20.524	36.53568	-58.2	8.9	-81.1	32.9	0.73259	0.875	-87.4	67.7	41.0	29.2	26.0	2.43850	2-3			
4	-10.665	-20.411	38.11133	-62.0	10.0	-80.7	32.4	0.76399	0.837	-87.2	67.8	36.4	33.3	30.7	3.38237	3-4			
5	-10.772	-20.389	39.20972	-56.0	10.3	-83.4	33.1	0.78621	0.813	-93.2	67.8	36.4	35.7	29.8	3.28928	4-5			
6	-10.772	-20.507	37.54278	-51.8	9.1	-83.6	33.6	0.75259	0.850	-92.9	67.7	41.0	31.9	25.1	3.49979	5-6			
7	-10.670	-20.524	36.53568	-58.2	8.9	-81.1	32.9	0.73259	0.875	-87.4	67.7	41.0	29.2	26.0	3.13654	6-7			

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JULY 31, 1964 13 HR 25 MIN 36 SEC 13 MS TAB NO 175 ATLAS PHOTO NO 175 POD SEQUENCE NO 964

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				12.786		30.02255		-10.432		-21.025		1765.478		2.597		-64.442		114.826	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.714	-20.467	35.44467	-57.0	9.6	-82.2	33.0	0.71187	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.668	-20.528	34.29347	-58.2	8.9	-81.1	32.9	0.68763	0.875	-87.4	67.7	41.0	29.2	26.0	2.28867	2-3			
4	-10.663	-20.421	35.77194	-62.0	10.0	-80.7	32.4	0.71710	0.838	-87.2	67.8	36.4	33.3	30.7	3.17453	3-4			
5	-10.763	-20.401	36.80257	-56.0	10.3	-83.4	33.1	0.73795	0.814	-93.2	67.8	36.4	35.7	29.8	3.08726	4-5			
6	-10.764	-20.511	35.23855	-51.8	9.1	-83.6	33.6	0.70640	0.851	-92.9	67.7	41.0	31.9	25.1	3.28468	5-6			
7	-10.668	-20.528	34.29347	-58.2	8.9	-81.1	32.9	0.68763	0.875	-87.4	67.7	41.0	29.2	26.0	2.94404	6-7			

JULY 31, 1964 13 HR 25 MIN 36 SEC 853 MS TAB NO 176 ATLAS PHOTO NO 176 POD SEQUENCE NO 965

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				11.946		28.05452		-10.445		-20.996		1763.510		2.598		-64.424		114.821	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.708	-20.475	33.12544	-57.0	9.6	-82.2	33.0	0.66529	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.666	-20.532	32.04979	-58.2	8.9	-81.1	32.9	0.64265	0.875	-87.4	67.7	41.0	29.2	26.0	2.13885	2-3			
4	-10.661	-20.432	33.43107	-62.0	10.0	-80.7	32.4	0.67017	0.838	-87.2	67.8	36.4	33.2	30.7	2.96663	3-4			
5	-10.754	-20.413	34.39395	-56.0	10.3	-83.4	33.1	0.68965	0.814	-93.2	67.8	36.4	35.7	29.7	2.88522	4-5			
6	-10.755	-20.516	32.93281	-51.8	9.1	-83.7	33.6	0.66018	0.851	-92.9	67.7	41.0	31.9	25.1	3.06948	5-6			
7	-10.666	-20.532	32.04979	-58.2	8.9	-81.1	32.9	0.64265	0.875	-87.4	67.7	41.0	29.2	26.0	2.75133	6-7			

JULY 31, 1964 13 HR 25 MIN 37 SEC 691 MS TAB NO 177 ATLAS PHOTO NO 177 POD SEQUENCE NO 966

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				11.106		26.08607		-10.457		-20.968		1761.541		2.599		-64.406		114.815	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.703	-20.482	30.80509	-57.0	9.6	-82.2	33.0	0.61869	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.663	-20.536	29.80502	-58.2	8.9	-81.1	32.9	0.59763	0.875	-87.4	67.7	41.0	29.2	26.0	1.98887	2-3			
4	-10.659	-20.443	31.08913	-62.0	10.0	-80.7	32.4	0.62322	0.838	-87.2	67.7	36.4	33.2	30.7	2.75861	3-4			
5	-10.746	-20.425	31.98423	-56.0	10.3	-83.4	33.1	0.64133	0.814	-93.2	67.8	36.4	35.7	29.7	2.68289	4-5			
6	-10.746	-20.521	30.62599	-51.8	9.1	-83.7	33.6	0.61394	0.851	-92.9	67.7	41.0	31.9	25.1	2.85420	5-6			
7	-10.663	-20.536	29.80502	-58.2	8.9	-81.1	32.9	0.59763	0.875	-87.4	67.7	41.0	29.2	26.0	2.55852	6-7			

JULY 31, 1964 13 HR 25 MIN 38 SEC 533 MS TAB NO 178 ATLAS PHOTO NO 178 POD SEQUENCE NO 967

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				10.266		24.11688		-10.470		-20.940		1759.572		2.600		-64.387		114.810	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.698	-20.490	28.48327	-57.0	9.6	-82.2	33.0	0.57206	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.661	-20.539	27.55880	-58.2	8.9	-81.1	32.9	0.55260	0.875	-87.4	67.6	41.0	29.2	26.0	1.83892	2-3			
4	-10.657	-20.454	28.76572	-62.0	10.0	-80.7	32.4	0.57625	0.838	-87.2	67.7	36.4	33.2	30.7	2.55051	3-4			
5	-10.737	-20.438	29.57307	-56.0	10.3	-83.4	33.1	0.59298	0.814	-93.2	67.8	36.4	35.6	29.7	2.48056	4-5			
6	-10.734	-20.526	28.31768	-51.8	9.1	-83.7	33.5	0.56767	0.851	-92.9	67.7	41.0	31.9	25.1	2.63882	5-6			
7	-10.661	-20.539	27.55880	-58.2	8.9	-81.1	32.9	0.55260	0.875	-87.4	67.6	41.0	29.2	26.0	2.36561	6-7			

JULY 31, 1964 13 HR 25 MIN 39 SEC 373 MS TAB NO 179 ATLAS PHOTO NO 179 POD SEQUENCE NO 968

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				9.426		22.14714		-10.483		-20.911		1757.602		2.601		-64.369		114.804	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.692	-20.498	26.16024	-57.0	9.6	-82.2	33.0	0.52540	0.844	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.658	-20.543	25.31137	-58.2	8.9	-81.1	32.9	0.50753	0.875	-87.4	67.6	41.0	29.2	26.0	1.68884	2-3			
4	-10.655	-20.465	26.40114	-62.0	10.0	-80.7	32.4	0.52925	0.838	-87.2	67.7	36.4	33.2	30.7	2.34234	3-4			
5	-10.728	-20.450	27.16075	-56.0	10.3	-83.4	33.1	0.54461	0.814	-93.2	67.7	36.4	35.6	29.7	2.27823	4-5			
6	-10.729	-20.531	26.00820	-51.8	9.1	-83.7	33.5	0.52137	0.851	-92.9	67.7	41.0	31.8	25.1	2.42338	5-6			
7	-10.658	-20.543	25.31137	-58.2	8.9	-81.1	32.9	0.50753	0.875	-87.4	67.6	41.0	29.2	26.0	2.17279	6-7			

JULY 31, 1964 13 HR 25 MIN 40 SEC 213 MS TAB NO 180 ATLAS PHOTO NO 180 POD SEQUENCE NO 969

TRAJECTORY DATA				SEC TO IMPACT		ALT		LAT		LON		R		V		PTH		AZ	
				8.586		20.17686		-10.496		-20.883		1755.632		2.603		-64.351		114.799	
PHOTO DATA																			
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT			
2	-10.687	-20.506	23.83600	-57.0	9.6	-82.2	33.0	0.47872	0.845	-90.2	67.7	38.6	32.4	28.0	0.	1-2			
3	-10.656	-20.547	23.06271	-58.2	8.9	-81.1	32.9	0.46244	0.875	-87.4	67.6	41.0	29.2	25.9	1.53869	2-3			
4	-10.652	-20.476	24.05534	-62.0	10.0	-80.7	32.5	0.48222	0.838	-87.2	67.7	36.4	33.2	30.6	2.13407	3-4			
5	-10.720	-20.462	24.74721	-56.0	10.3	-83.4	33.1	0.49622	0.814	-93.2	67.7	36.4	35.6	29.7	2.07560	4-5			
6	-10.720	-20.536	23.69748	-51.8	9.1	-83.7	33.5	0.47505	0.851	-92.9	67.7	41.0	31.8	25.1	2.20785	5-6			
7	-10.656	-20.547	23.06271	-58.2	8.9	-81.1	32.9	0.46244	0.875	-87.4	67.6	41.0	29.2	25.9	1.97967	6-7			

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JULY 31, 1964 13 HR 25 MIN 41 SEC 53 MS TAB NO 181 ATLAS PHOTO NO 181 POD SEQUENCE NO 970

TRAJECTORY DATA				SEC TO IMPACT				ALT				LAT				LCN				R				V				PTH				AZ			
				7.747				18.20596				-10.509				-20.854				1753.661				2.604				-64.332				114.793			
PHOTO DATA																																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																			
2	-10.681	-20.514	21.51041	-57.0	9.6	-82.2	33.0	0.43202	0.845	-90.2	67.7	38.6	32.4	27.9	0.	1-2																			
3	-10.653	-20.551	20.81274	-58.2	8.9	-81.1	32.9	0.41733	0.875	-87.4	67.6	41.0	29.2	25.9	1.38848	2-3																			
4	-10.650	-20.486	21.70822	-62.0	10.0	-80.7	32.5	0.43517	0.838	-87.2	67.7	36.4	33.2	30.6	1.92573	3-4																			
5	-10.711	-20.474	22.33239	-56.0	10.3	-83.4	33.1	0.44780	0.814	-93.2	67.7	36.4	35.6	29.7	1.87307	4-5																			
6	-10.711	-20.541	21.38543	-51.8	9.1	-83.7	33.5	0.42870	0.851	-92.9	67.6	41.0	31.8	25.1	1.99227	5-6																			
7	-10.653	-20.551	20.81274	-58.2	8.9	-81.1	32.9	0.41733	0.875	-87.4	67.6	41.0	29.2	25.9	1.78645	6-7																			

JULY 31, 1964 13 HR 25 MIN 41 SEC 893 MS TAB NO 182 ATLAS PHOTO NO 182 POD SEQUENCE NO 971

TRAJECTORY DATA				SEC TO IMPACT				ALT				LAT				LCN				R				V				PTH				AZ			
				6.907				18.23447				-10.522				-20.826				1751.690				2.605				-64.314				114.788			
PHOTO DATA																																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																			
2	-10.676	-20.522	19.18353	-57.0	9.6	-82.2	33.0	0.38528	0.845	-90.2	67.7	38.6	32.4	27.9	0.	1-2																			
3	-10.651	-20.555	18.56148	-58.2	8.9	-81.1	32.9	0.37219	0.875	-87.4	67.6	41.0	29.1	25.9	1.23817	2-3																			
4	-10.648	-20.497	19.35982	-62.0	10.0	-80.7	32.5	0.38809	0.838	-87.2	67.7	36.4	33.2	30.6	1.71729	3-4																			
5	-10.702	-20.486	19.91626	-56.0	10.2	-83.4	33.1	0.39935	0.815	-93.2	67.7	36.4	35.6	29.7	1.67034	4-5																			
6	-10.703	-20.546	19.07207	-51.8	9.1	-83.7	33.5	0.38233	0.851	-92.9	67.6	41.0	31.8	25.1	1.77658	5-6																			
7	-10.651	-20.555	18.56148	-58.2	8.9	-81.1	32.9	0.37219	0.875	-87.4	67.6	41.0	29.1	25.9	1.59312	6-7																			

JULY 31, 1964 13 HR 25 MIN 42 SEC 733 MS TAB NO 183 ATLAS PHOTO NO 183 POD SEQUENCE NO 972

TRAJECTORY DATA				SEC TO IMPACT				ALT				LAT				LCN				R				V				PTH				AZ			
				6.067				14.26222				-10.535				-20.797				1749.718				2.606				-64.295				114.782			
PHOTO DATA																																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																			
2	-10.670	-20.530	18.85516	-57.0	9.6	-82.2	33.0	0.33852	0.845	-90.2	67.7	38.6	32.4	27.9	0.	1-2																			
3	-10.648	-20.559	16.30874	-58.2	8.9	-81.1	32.9	0.32701	0.875	-87.4	67.6	41.0	29.1	25.9	1.08789	2-3																			
4	-10.646	-20.508	17.00995	-62.0	10.0	-80.7	32.5	0.34099	0.838	-87.2	67.7	36.4	33.2	30.6	1.50876	3-4																			
5	-10.694	-20.499	17.49869	-56.0	10.2	-83.4	33.1	0.35087	0.815	-93.2	67.7	36.4	35.6	29.7	1.46752	4-5																			
6	-10.694	-20.551	16.75726	-51.8	9.1	-83.7	33.5	0.33592	0.851	-92.9	67.6	41.0	31.8	25.1	1.56081	5-6																			
7	-10.648	-20.559	16.30874	-58.2	8.9	-81.1	32.9	0.32701	0.875	-87.4	67.6	41.0	29.1	25.9	1.39979	6-7																			

JULY 31, 1964 13 HR 25 MIN 43 SEC 573 MS TAB NO 184 ATLAS PHOTO NO 184 POD SEQUENCE NO 973

TRAJECTORY DATA				SEC TO IMPACT				ALT				LAT				LCN				R				V				PTH				AZ			
				5.227				12.28938				-10.548				-20.768				1747.745				2.607				-64.277				114.777			
PHOTO DATA																																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																			
2	-10.665	-20.538	14.52553	-57.0	9.6	-82.2	33.0	0.29173	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2																			
3	-10.646	-20.563	14.05474	-58.2	8.9	-81.1	32.9	0.28182	0.875	-87.4	67.6	41.0	29.1	25.9	0.93748	2-3																			
4	-10.644	-20.519	14.65883	-62.0	10.0	-80.7	32.5	0.29386	0.838	-87.2	67.7	36.4	33.2	30.6	1.30012	3-4																			
5	-10.685	-20.511	15.07987	-56.0	10.2	-83.4	33.1	0.30237	0.815	-93.2	67.7	36.4	35.6	29.6	1.26469	4-5																			
6	-10.685	-20.556	14.44116	-51.8	9.1	-83.7	33.5	0.28949	0.851	-92.9	67.6	41.0	31.8	25.1	1.36495	5-6																			
7	-10.646	-20.563	14.05474	-58.2	8.9	-81.1	32.9	0.28182	0.875	-87.4	67.6	41.0	29.1	25.9	1.20626	6-7																			

JULY 31, 1964 13 HR 25 MIN 44 SEC 413 MS TAB NO 185 ATLAS PHOTO NO 185 POD SEQUENCE NO 974

TRAJECTORY DATA				SEC TO IMPACT				ALT				LAT				LCN				R				V				PTH				AZ			
				4.387				10.31599				-10.561				-20.740				1745.771				2.609				-64.258				114.771			
PHOTO DATA																																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																			
2	-10.659	-20.546	12.19456	-57.0	9.5	-82.2	33.0	0.24492	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2																			
3	-10.643	-20.567	11.79941	-58.2	8.9	-81.1	32.9	0.23660	0.875	-87.4	67.6	41.0	29.1	25.9	0.78699	2-3																			
4	-10.642	-20.530	12.30540	-62.0	10.0	-80.7	32.5	0.24670	0.839	-87.2	67.7	36.4	33.2	30.6	1.09141	3-4																			
5	-10.676	-20.523	12.65974	-56.0	10.2	-83.4	33.1	0.25385	0.815	-93.2	67.7	36.4	35.5	29.6	1.06166	4-5																			
6	-10.676	-20.561	12.12376	-51.8	9.1	-83.7	33.5	0.24304	0.851	-92.9	67.6	41.0	31.8	25.1	1.12901	5-6																			
7	-10.643	-20.567	11.79941	-58.2	8.9	-81.1	32.9	0.23660	0.875	-87.4	67.6	41.0	29.1	25.9	1.01272	6-7																			

JULY 31, 1964 13 HR 25 MIN 45 SEC 253 MS TAB NO 186 ATLAS PHOTO NO 186 POD SEQUENCE NO 975

TRAJECTORY DATA				SEC TO IMPACT				ALT				LAT				LCN				R				V				PTH				AZ			
				3.547				8.34204				-10.574				-20.711				1743.797				2.610				-64.240				114.766			
PHOTO DATA																																			
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																			
2	-10.654	-20.554	9.86237	-57.0	9.5	-82.2	33.0	0.19808	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2																			
3	-10.641	-20.571	9.54288	-58.2	8.9	-81.1	32.9	0.19135	0.875	-87.4	67.6	41.0	29.1	25.9	0.63644	2-3																			
4	-10.639	-20.541	9.95277	-62.0	10.0	-80.7	32.5	0.19952	0.839	-87.2	67.6	36.4	33.1	30.6	0.88261	3-4																			
5	-10.667	-20.536	10.23842	-56.0	10.2	-83.4	33.1	0.20529	0.815	-93.2	67.7	36.4	35.5	29.6	0.85853	4-5																			
6	-10.667	-20.566	9.80510	-51.9	9.1	-83.7	33.5	0.19656	0.851	-92.9	67.6	41.0	31.8	25.1	0.91298	5-6																			
7	-10.641	-20.571	9.54288	-58.2	8.9	-81.1	32.9	0.19135	0.875	-87.4	67.6	41.0	29.1	25.9	0.81898	6-7																			

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JULY 31, 1964 13 HR 25 MIN 46 SEC 93 MS TAB NO 187 ATLAS PHOTO NO 187 POD SEQUENCE NO 976

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
		2.707		6.36743		-10.588		-20.682		1741.823		2.611		-64.221		114.760	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.648	-20.562	7.52881	-57.0	9.5	-82.2	33.0	0.15121	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2	
3	-10.638	-20.575	7.28498	-58.2	8.9	-81.1	32.9	0.14607	0.875	-87.4	67.6	41.0	29.1	25.9	0.48586	2-3	
4	-10.637	-20.552	7.59776	-62.0	10.0	-80.7	32.5	0.15231	0.839	-87.2	67.6	36.4	33.1	30.6	0.67372	3-4	
5	-10.658	-20.548	7.81573	-56.0	10.2	-83.4	33.1	0.15672	0.815	-93.2	67.6	36.4	35.5	29.6	0.65531	4-5	
6	-10.659	-20.571	7.48510	-51.9	9.1	-83.7	33.5	0.15005	0.851	-92.9	67.6	41.0	31.8	25.0	0.63691	5-6	
7	-10.638	-20.575	7.28498	-58.2	8.9	-81.1	32.9	0.14607	0.875	-87.4	67.6	41.0	29.1	25.9	0.62524	6-7	

JULY 31, 1964 13 HR 25 MIN 46 SEC 933 MS TAB NO 188 ATLAS PHOTO NO 188 POD SEQUENCE NO 977

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
		1.867		4.39209		-10.601		-20.653		1739.847		2.612		-64.202		114.755	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.642	-20.570	5.19380	-57.0	9.5	-82.2	33.0	0.10431	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2	
3	-10.636	-20.579	5.02564	-58.2	8.9	-81.1	32.9	0.10077	0.875	-87.4	67.6	41.0	29.1	25.9	0.33511	2-3	
4	-10.635	-20.563	5.24134	-61.9	10.0	-80.7	32.5	0.10507	0.835	-87.2	67.6	36.4	33.1	30.6	0.46474	3-4	
5	-10.650	-20.560	5.39165	-56.0	10.2	-83.4	33.1	0.10811	0.815	-93.2	67.6	36.4	35.5	29.6	0.45208	4-5	
6	-10.650	-20.577	5.16364	-51.9	9.1	-83.7	33.5	0.10351	0.852	-92.9	67.6	41.0	31.8	25.0	0.48072	5-6	
7	-10.636	-20.579	5.02564	-58.2	8.9	-81.1	32.9	0.10077	0.875	-87.4	67.6	41.0	29.1	25.9	0.43120	6-7	

JULY 31, 1964 13 HR 25 MIN 47 SEC 773 MS TAB NO 189 ATLAS PHOTO NO 189 POD SEQUENCE NO 978

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
		1.027		2.41638		-10.614		-20.624		1737.872		2.614		-64.184		114.749	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.637	-20.578	2.85782	-57.0	9.5	-82.2	33.0	0.05740	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2	
3	-10.633	-20.583	2.76531	-58.2	8.9	-81.1	32.9	0.05545	0.875	-87.4	67.6	41.0	29.1	25.9	0.18440	2-3	
4	-10.633	-20.574	2.88395	-61.9	10.0	-80.7	32.5	0.05781	0.839	-87.2	67.6	36.4	33.1	30.5	0.25570	3-4	
5	-10.641	-20.573	2.96662	-56.0	10.2	-83.4	33.1	0.05949	0.816	-93.2	67.6	36.4	35.5	29.6	0.24867	4-5	
6	-10.641	-20.582	2.84122	-51.9	9.1	-83.7	33.5	0.05696	0.852	-92.9	67.6	41.0	31.8	25.0	0.26449	5-6	
7	-10.633	-20.583	2.76531	-58.2	8.9	-81.1	32.9	0.05545	0.875	-87.4	67.6	41.0	29.1	25.9	0.23726	6-7	

JULY 31, 1964 13 HR 25 MIN 48 SEC 612 MS TAB NO 190 ATLAS PHOTO NO 190 POD SEQUENCE NO 979

TRAJECTORY DATA		SEC TO IMPACT		ALT		LAT		LCN		R		V		PTH		AZ	
		0.187		0.43993		-10.627		-20.594		1735.895		2.615		-64.165		114.743	
PHOTO DATA																	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.631	-20.586	0.52035	-57.0	9.5	-82.2	33.0	0.01045	0.845	-90.2	67.6	38.6	32.3	27.9	0.	1-2	
3	-10.631	-20.587	0.50351	-58.2	8.9	-81.1	32.9	0.01010	0.875	-87.4	67.6	41.0	29.1	25.9	0.03357	2-3	
4	-10.631	-20.586	0.52510	-61.9	10.0	-80.7	32.5	0.01053	0.839	-87.2	67.6	36.4	33.1	30.5	0.04656	3-4	
5	-10.632	-20.585	0.54015	-56.0	10.2	-83.4	33.1	0.01083	0.816	-93.2	67.6	36.4	35.5	29.6	0.04524	4-5	
6	-10.632	-20.587	0.51734	-51.9	9.1	-83.7	33.5	0.01037	0.852	-92.9	67.6	41.0	31.8	25.0	0.04814	5-6	
7	-10.631	-20.587	0.50351	-58.2	8.9	-81.1	32.9	0.01010	0.875	-87.4	67.6	41.0	29.1	25.9	0.04321	6-7	

TIME- AND CAMERA-DEPENDENT PARAMETERS

RA-VII CAMERA P4

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TAB NO 1										ATLAS PHOTO NO 1										POD SEQUENCE NO 17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						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RA-VII CAMERA P4

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JULY 31, 1964 13 HR 14 MIN 16 SEC 894 MS TAB NO 7 ATLAS PHOTO NO 7 POD SEQUENCE NO 155

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		691.906	1474.81857	-4.637	-33.108	3210.274	2.060	-72.752	116.687							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.608	-18.593	1614.78957	-55.0	11.0	-81.3	33.9	32.82305	0.815	-89.2	69.6	39.0	33.3	29.8	0.	0-1
2	-12.213	-17.551	1634.02332	-57.7	11.6	-81.2	32.3	32.81780	0.815	-88.3	70.6	38.2	35.4	31.5	34.39905	1-2
3	-10.151	-20.463	1578.55345	-60.3	9.4	-80.1	31.0	31.65221	0.878	-85.6	67.6	40.7	28.8	26.4	106.69572	2-3
4	-9.840	-15.434	1654.54184	-66.9	11.0	-80.8	26.7	33.16547	0.795	-85.1	72.5	36.1	37.5	36.1	150.30077	3-4
5	-14.484	-14.174	1709.10388	-55.8	14.4	-83.0	33.5	34.26991	0.739	-91.3	74.1	35.9	42.5	36.7	145.53756	4-5
6	-14.579	-19.556	1625.31473	-47.8	12.0	-81.2	38.0	32.57987	0.826	-91.1	68.9	40.5	34.4	26.5	157.82372	5-6
7	-10.151	-20.463	1578.55345	-60.3	9.4	-80.1	31.0	31.65221	0.878	-85.6	67.6	40.7	28.8	26.4	136.75326	6-7

JULY 31, 1964 13 HR 14 MIN 33 SEC 693 MS TAB NO 8 ATLAS PHOTO NO 8 POD SEQUENCE NO 175

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		675.107	1441.72104	-4.720	-32.942	3177.176	2.068	-72.629	116.666							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.577	-18.595	1578.98688	-55.1	11.0	-81.3	33.9	32.12884	0.815	-89.2	69.5	39.1	33.1	29.7	0.	0-1
2	-12.209	-17.545	1599.42139	-57.7	11.6	-81.2	32.3	32.12285	0.815	-88.3	70.6	38.2	35.4	31.5	36.56334	1-2
3	-10.192	-20.398	1544.99071	-60.3	9.4	-80.1	31.0	30.97923	0.877	-85.6	67.7	40.6	28.9	26.5	104.50280	2-3
4	-9.886	-15.474	1619.45732	-66.8	11.0	-80.8	26.8	32.46219	0.795	-85.1	72.5	36.1	37.5	36.1	147.15392	3-4
5	-14.432	-14.242	1672.87360	-55.8	14.3	-83.0	33.5	33.54340	0.739	-91.3	74.0	35.9	42.5	36.7	142.45356	4-5
6	-14.525	-19.509	1590.81738	-47.9	12.0	-81.3	37.9	31.88834	0.826	-91.1	69.0	40.5	34.5	26.6	154.49628	5-6
7	-10.192	-20.398	1544.99071	-60.3	9.4	-80.1	31.0	30.97923	0.877	-85.6	67.7	40.6	28.9	26.5	133.86673	6-7

JULY 31, 1964 13 HR 14 MIN 50 SEC 492 MS TAB NO 9 ATLAS PHOTO NO 9 POD SEQUENCE NO 195

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		658.308	1408.52094	-4.805	-32.773	3143.976	2.075	-72.504	116.644							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.547	-18.658	1543.05943	-55.1	11.0	-81.3	33.8	31.42949	0.814	-89.2	69.5	39.1	33.0	29.5	0.	0-1
2	-12.205	-17.548	1564.56339	-57.7	11.6	-81.2	32.3	31.42276	0.815	-88.3	70.6	38.2	35.4	31.5	38.48479	1-2
3	-10.231	-20.341	1511.20634	-60.2	9.5	-80.1	31.0	30.30181	0.876	-85.6	67.7	40.6	29.0	26.6	102.28056	2-3
4	-9.932	-15.523	1584.10094	-66.7	11.0	-80.8	26.9	31.75345	0.795	-85.1	72.4	36.0	37.5	36.0	143.96465	3-4
5	-14.379	-14.318	1636.34659	-55.9	14.3	-83.0	33.5	32.81099	0.740	-91.3	74.0	35.9	42.4	36.6	139.33996	4-5
6	-14.470	-19.469	1556.08096	-48.0	11.9	-81.3	37.8	31.19203	0.825	-91.2	69.0	40.5	34.5	26.6	151.12125	5-6
7	-10.231	-20.341	1511.20634	-60.2	9.5	-80.1	31.0	30.30181	0.876	-85.6	67.7	40.6	29.0	26.6	130.95716	6-7

JULY 31, 1964 13 HR 15 MIN 5 SEC 611 MS TAB NO 10 ATLAS PHOTO NO 10 POD SEQUENCE NO 213

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		643.189	1378.55212	-4.883	-32.617	3114.007	2.083	-72.389	116.624							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.520	-18.714	1510.61151	-55.1	11.0	-81.3	33.8	30.79694	0.814	-89.3	69.4	39.2	32.9	29.4	0.	0-1
2	-12.200	-17.552	1533.03697	-57.7	11.6	-81.2	32.3	30.78959	0.815	-88.3	70.6	38.2	35.4	31.5	40.16437	1-2
3	-10.266	-20.291	1480.65987	-60.2	9.5	-80.1	31.1	29.68931	0.876	-85.6	67.8	40.6	29.0	26.6	100.26640	2-3
4	-9.973	-15.569	1552.12488	-66.6	11.1	-80.7	27.0	31.11248	0.795	-85.1	72.4	36.0	37.5	36.0	141.07678	3-4
5	-14.330	-14.389	1603.30696	-55.9	14.3	-82.9	33.5	32.14850	0.741	-91.3	73.9	35.9	42.3	36.6	136.52213	4-5
6	-14.419	-19.434	1524.66801	-48.1	11.9	-81.3	37.7	30.56234	0.825	-91.2	69.0	40.5	34.5	26.7	148.06507	5-6
7	-10.266	-20.291	1480.65987	-60.2	9.5	-80.1	31.1	29.68931	0.876	-85.6	67.8	40.6	29.0	26.6	128.32421	6-7

JULY 31, 1964 13 HR 15 MIN 22 SEC 410 MS TAB NO 11 ATLAS PHOTO NO 11 POD SEQUENCE NO 233

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		626.390	1345.15259	-4.971	-32.440	3080.608	2.091	-72.259	116.601							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.489	-18.777	1474.43172	-55.1	10.9	-81.3	33.8	30.09041	0.814	-89.3	69.4	39.2	32.7	29.3	0.	0-1
2	-12.193	-17.559	1497.82539	-57.7	11.6	-81.2	32.3	30.08239	0.815	-88.3	70.6	38.2	35.5	31.5	41.93947	1-2
3	-10.303	-20.237	1446.55426	-60.1	9.6	-80.1	31.1	29.00544	0.875	-85.6	67.8	40.6	29.1	26.7	98.01121	2-3
4	-10.016	-15.623	1516.41315	-66.5	11.1	-80.7	27.1	30.39664	0.795	-85.1	72.3	36.0	37.4	36.0	137.84712	3-4
5	-14.273	-14.471	1566.39941	-55.9	14.2	-82.9	33.5	31.40845	0.741	-91.3	73.8	35.9	42.2	36.5	133.37188	4-5
6	-14.361	-19.399	1489.58641	-48.2	11.9	-81.4	37.6	29.85911	0.825	-91.2	69.1	40.5	34.5	26.8	144.64688	5-6
7	-10.303	-20.237	1446.55426	-60.1	9.6	-80.1	31.1	29.00544	0.875	-85.6	67.8	40.6	29.1	26.7	125.38151	6-7

JULY 31, 1964 13 HR 15 MIN 35 SEC 849 MS TAB NO 12 ATLAS PHOTO NO 12 POD SEQUENCE NO 249

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ							
		612.950	1318.35541	-5.043	-32.296	3053.811	2.097	-72.153	116.583							
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.465	-18.827	1445.39056	-55.1	10.9	-81.3	33.8	29.52154	0.814	-89.3	69.3	39.3	32.6	29.2	0.	0-1
2	-12.184	-17.568	1469.47766	-57.7	11.6	-81.2	32.3	29.51306	0.815	-88.3	70.6	38.2	35.5	31.5	42.22158	1-2
3	-10.330	-20.197	1419.11438	-60.1	9.6	-80.1	31.1	28.45523	0.874	-85.6	67.9	40.6	29.2	26.8	96.18700	2-3
4	-10.048	-15.670	1487.66716	-66.4	11.1	-80.7	27.2	29.82042	0.795	-85.1	72.3	36.0	37.4	35.9	135.26126	3-4
5	-14.224	-14.541	1536.67029	-55.9	14.2	-82.9	33.4	30.81234	0.742	-91.3	73.7	35.9	42.2	36.4	130.82786	4-5
6	-14.310	-19.374	1461.34283	-48.3	11.9	-81.4	37.5	29.29296	0.825	-91.2	69.1	40.5	34.5	26.8	141.88625	5-6
7	-10.330	-20.197	1419.11438	-60.1	9.6	-80.1	31.1	28.45523	0.874	-85.6	67.9	40.6	29.2	26.8	123.00700	6-7

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JULY 31, 1964 13 HR 15 MIN 50 SEC 968 MS
 TAB NO 13 ATLAS PHOTO NO 13 POD SEQUENCE NO 267

TRAJECTORY DATA
 SEC TO IMPACT 597.831 ALT 1288.12503 LAT -5.125 LCN -32.131 R 3023.580 V 2.105 PTH -72.032 AZ 116.561

PHOTO DATA
 PT LAT LCN RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT
 1 -11.438 -18.864 1412.61433 -55.2 10.9 -81.3 33.7 28.87790 0.814 -89.3 69.3 39.4 32.5 29.1 0. 0-1
 2 -12.170 -17.582 1437.40959 -57.7 11.6 -81.2 32.3 28.86900 0.815 -88.3 70.6 38.2 35.5 31.5 44.53862 1-2
 3 -10.356 -20.154 1388.08945 -60.1 9.6 -80.1 31.1 27.83314 0.874 -85.6 67.9 40.6 29.3 26.8 94.11533 2-3
 4 -10.081 -15.725 1455.16078 -66.3 11.1 -80.7 27.3 29.16863 0.796 -85.1 72.2 36.0 37.4 35.9 132.29250 3-4
 5 -14.165 -14.623 1503.02603 -55.9 14.1 -82.9 33.4 30.13773 0.743 -91.3 73.7 35.8 42.1 36.4 127.94029 4-5
 6 -14.250 -19.348 1429.38510 -48.5 11.9 -81.4 37.4 28.65236 0.825 -91.2 69.1 40.4 34.5 26.8 138.75962 5-6
 7 -10.356 -20.154 1388.08945 -60.1 9.6 -80.1 31.1 27.83314 0.874 -85.6 67.9 40.6 29.3 26.8 120.31300 6-7

JULY 31, 1964 13 HR 16 MIN 7 SEC 767 MS
 TAB NO 14 ATLAS PHOTO NO 14 POD SEQUENCE NO 287

TRAJECTORY DATA
 SEC TO IMPACT 581.032 ALT 1254.42599 LAT -5.219 LCN -31.943 R 2989.885 V 2.114 PTH -71.895 AZ 116.537

PHOTO DATA
 PT LAT LCN RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT
 1 -11.407 -18.947 1376.06378 -55.2 10.9 -81.4 33.7 28.15797 0.814 -89.3 69.2 39.4 32.4 29.0 0. 0-1
 2 -12.152 -17.601 1401.54462 -57.7 11.6 -81.2 32.3 28.14869 0.815 -88.3 70.6 38.1 35.4 31.5 45.83163 1-2
 3 -10.383 -20.110 1353.41104 -60.1 9.6 -80.1 31.1 27.13779 0.873 -85.6 68.0 40.6 29.3 26.9 91.78846 2-3
 4 -10.114 -15.791 1418.81120 -66.2 11.1 -80.6 27.4 26.44022 0.796 -85.1 72.2 36.0 37.4 35.8 128.98831 3-4
 5 -14.096 -14.720 1465.38199 -56.0 14.1 -82.9 33.4 29.38291 0.744 -91.3 73.6 35.8 42.0 36.3 124.70231 4-5
 6 -14.178 -19.324 1393.64348 -48.6 11.9 -81.5 37.2 27.93552 0.825 -91.2 69.1 40.4 34.5 26.9 135.25370 5-6
 7 -10.383 -20.110 1353.41104 -60.1 9.6 -80.1 31.1 27.13779 0.873 -85.6 68.0 40.6 29.3 26.9 117.29404 6-7

JULY 31, 1964 13 HR 16 MIN 22 SEC 886 MS
 TAB NO 15 ATLAS PHOTO NO 15 POD SEQUENCE NO 305

TRAJECTORY DATA
 SEC TO IMPACT 565.913 ALT 1224.00778 LAT -5.305 LCN -31.770 R 2959.463 V 2.122 PTH -71.770 AZ 116.514

PHOTO DATA
 PT LAT LCN RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT
 1 -11.383 -19.003 1443.04695 -55.3 10.9 -81.4 33.6 27.50490 0.814 -89.3 69.1 39.5 32.2 28.9 0. 0-1
 2 -12.132 -17.625 1369.01274 -57.8 11.6 -81.2 32.2 27.49531 0.815 -88.3 70.6 38.1 35.4 31.5 46.77404 1-2
 3 -10.404 -20.077 1321.98007 -60.1 9.6 -80.1 31.1 26.50755 0.873 -85.6 68.0 40.5 29.4 26.9 89.66561 2-3
 4 -10.141 -15.858 1385.83842 -66.2 11.2 -80.6 27.5 27.77929 0.797 -85.1 72.1 36.0 37.3 35.8 125.97898 3-4
 5 -14.030 -14.815 1431.21306 -56.0 14.0 -82.9 33.3 28.69778 0.746 -91.3 73.5 35.8 41.9 36.2 121.75639 4-5
 6 -14.111 -19.309 1361.22923 -48.7 11.8 -81.5 37.1 27.28618 0.825 -91.2 69.1 40.4 34.5 26.9 132.05777 5-6
 7 -10.404 -20.077 1321.98007 -60.1 9.6 -80.1 31.1 26.50755 0.873 -85.6 68.0 40.5 29.4 26.9 114.55051 6-7

JULY 31, 1964 13 HR 16 MIN 34 SEC 645 MS
 TAB NO 16 ATLAS PHOTO NO 16 POD SEQUENCE NO 319

TRAJECTORY DATA
 SEC TO IMPACT 554.154 ALT 1200.28186 LAT -5.373 LCN -31.633 R 2935.737 V 2.128 PTH -71.670 AZ 116.497

PHOTO DATA
 PT LAT LCN RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT
 1 -11.359 -19.047 1417.28673 -55.3 10.8 -81.4 33.6 26.99402 0.814 -89.3 69.1 39.5 32.1 28.8 0. 0-1
 2 -12.113 -17.647 1343.56750 -57.8 11.6 -81.2 32.2 26.98427 0.815 -88.3 70.5 38.1 35.4 31.5 47.40038 1-2
 3 -10.418 -20.053 1247.40749 -60.1 9.7 -80.1 31.1 26.01463 0.873 -85.6 68.0 40.5 29.4 26.9 87.99946 2-3
 4 -10.160 -15.913 1360.05458 -66.1 11.2 -80.6 27.5 27.26247 0.797 -85.1 72.1 36.0 37.3 35.7 123.62320 3-4
 5 -13.976 -14.892 1404.47444 -56.1 14.0 -82.9 33.3 28.16171 0.747 -91.3 73.4 35.8 41.8 36.1 119.44659 4-5
 6 -14.055 -19.300 1335.87329 -48.8 11.8 -81.5 37.0 26.77793 0.826 -91.2 69.1 40.4 34.5 26.9 129.55446 5-6
 7 -10.418 -20.053 1297.40749 -60.1 9.7 -80.1 31.1 26.01463 0.873 -85.6 68.0 40.5 29.4 26.9 112.40004 6-7

JULY 31, 1964 13 HR 16 MIN 46 SEC 405 MS
 TAB NO 17 ATLAS PHOTO NO 17 POD SEQUENCE NO 333

TRAJECTORY DATA
 SEC TO IMPACT 542.395 ALT 1176.49860 LAT -5.442 LCN -31.494 R 2911.954 V 2.134 PTH -71.569 AZ 116.478

PHOTO DATA
 PT LAT LCN RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT
 1 -11.338 -19.091 1291.45448 -55.4 10.8 -81.4 33.5 26.48066 0.815 -89.3 69.1 39.6 32.0 28.7 0. 0-1
 2 -12.094 -17.671 1318.00055 -57.8 11.6 -81.2 32.2 26.47078 0.815 -88.3 70.5 38.1 35.4 31.5 47.94309 1-2
 3 -10.448 -20.007 1237.22133 -60.1 9.7 -80.1 31.1 25.51992 0.872 -85.6 68.1 40.5 29.4 27.0 86.32128 2-3
 4 -10.178 -15.970 1344.15002 -66.1 11.1 -80.6 27.6 26.74323 0.798 -85.1 72.0 36.0 37.2 35.7 121.25377 3-4
 5 -13.927 -14.972 1377.61081 -56.1 13.9 -82.8 33.2 27.62258 0.748 -91.3 73.3 35.8 41.7 36.1 117.12285 4-5
 6 -13.994 -19.293 1310.39647 -48.9 11.8 -81.5 36.9 26.26726 0.826 -91.2 69.1 40.4 34.5 26.9 127.03615 5-6
 7 -10.430 -20.010 1272.72549 -60.1 9.7 -80.1 31.1 25.51992 0.872 -85.6 68.1 40.5 29.4 27.0 110.23711 6-7

JULY 31, 1964 13 HR 17 MIN 3 SEC 204 MS
 TAB NO 18 ATLAS PHOTO NO 18 POD SEQUENCE NO 353

TRAJECTORY DATA
 SEC TO IMPACT 525.596 ALT 1142.42206 LAT -5.542 LCN -31.291 R 2877.877 V 2.144 PTH -71.423 AZ 116.452

PHOTO DATA
 PT LAT LCN RANGE AZS/C AZN AZSUN AZA A* B/A AZPHAZ INCD PHAZ EMIS ALPHA SCALE PT-PT
 1 -11.308 -19.154 1254.42549 -55.5 10.8 -81.4 33.4 25.74177 0.815 -89.3 69.0 39.6 31.9 28.6 0. 0-1
 2 -12.065 -17.714 1281.20009 -57.8 11.5 -81.2 32.2 25.73168 0.816 -88.3 70.5 38.1 35.3 31.4 48.46959 1-2
 3 -10.448 -20.007 1237.22133 -60.1 9.7 -80.1 31.1 24.80801 0.872 -85.6 68.1 40.5 29.4 27.0 83.89450 2-3
 4 -10.203 -16.061 1296.84685 -66.0 11.1 -80.5 27.6 25.99551 0.798 -85.1 71.9 36.0 37.1 35.6 113.77599 3-4
 5 -13.833 -15.097 1338.91844 -56.2 13.8 -82.6 33.2 26.84714 0.750 -91.3 73.2 35.8 41.6 35.9 113.77599 4-5
 6 -13.915 -19.292 1273.74643 -49.1 11.7 -81.6 36.7 25.53263 0.826 -91.2 69.1 40.4 34.4 27.0 123.39026 5-6
 7 -10.448 -20.007 1237.22133 -60.1 9.7 -80.1 31.1 24.80801 0.872 -85.6 68.1 40.5 29.4 27.0 107.12493 6-7

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JULY 31, 1964 13 HR 17 MIN 16 SEC 643 MS TAB NO 19 ATLAS PHOTO NO 19 POD SEQUENCE NO 369

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

512.156 1115.07404 -5.624 -31.125 2850.529 2.151 -71.303 116.430

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.284	-19.204	1224.69347	-55.5	10.8	-81.4	33.4	25.14627	0.816	-89.3	68.9	39.7	31.8	28.5	0.	0-1
2	-12.042	-17.756	1251.54031	-57.9	11.5	-81.2	32.1	25.13599	0.817	-88.3	70.4	38.1	35.3	31.4	48.70688	1-2
3	-10.463	-19.995	1208.62119	-60.1	9.7	-80.1	31.1	24.23454	0.872	-85.6	68.1	40.6	29.5	27.0	81.93122	2-3
4	-10.223	-16.141	1266.76982	-66.0	11.1	-80.5	27.7	25.39265	0.799	-85.1	71.9	36.0	37.1	35.5	115.04581	3-4
5	-13.774	-15.204	1307.72290	-56.2	13.7	-82.8	33.1	26.22163	0.751	-91.3	73.1	35.8	41.4	35.8	111.07846	4-5
6	-13.849	-19.298	1244.22365	-49.2	11.7	-81.6	36.6	24.94086	0.827	-91.2	69.1	40.4	34.3	26.9	120.43810	5-6
7	-10.463	-19.995	1208.62119	-60.1	9.7	-80.1	31.1	24.23454	0.872	-85.6	68.1	40.6	29.5	27.0	104.61823	6-7

JULY 31, 1964 13 HR 17 MIN 26 SEC 402 MS TAB NO 20 ATLAS PHOTO NO 20 POD SEQUENCE NO 383

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

500.397 1091.08075 -5.698 -30.977 2826.536 2.158 -71.197 116.410

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.263	-19.247	1196.59798	-55.5	10.7	-81.4	33.4	24.62430	0.816	-89.3	68.9	39.8	31.7	28.4	0.	0-1
2	-12.022	-17.790	1225.54398	-57.9	11.5	-81.2	32.1	24.61368	0.817	-88.3	70.4	38.1	35.2	31.3	48.97653	1-2
3	-10.476	-19.981	1183.54301	-60.1	9.7	-80.1	31.1	23.73169	0.872	-85.6	68.1	40.6	29.5	27.0	80.21575	2-3
4	-10.241	-16.209	1240.41365	-65.9	11.1	-80.5	27.8	24.86436	0.800	-85.1	71.8	36.0	37.0	35.4	112.61929	3-4
5	-13.718	-15.295	1280.40053	-56.2	13.7	-82.8	33.1	25.67378	0.752	-91.3	73.0	35.8	41.3	35.7	108.72022	4-5
6	-13.791	-19.300	1210.34554	-49.3	11.6	-81.6	36.5	24.42215	0.827	-91.2	69.1	40.4	34.3	26.9	117.86292	5-6
7	-10.476	-19.981	1183.54301	-60.1	9.7	-80.1	31.1	23.73169	0.872	-85.6	68.1	40.6	29.5	27.0	102.42382	6-7

JULY 31, 1964 13 HR 17 MIN 41 SEC 841 MS TAB NO 21 ATLAS PHOTO NO 21 POD SEQUENCE NO 399

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

486.958 1063.58527 -5.783 -30.805 2799.041 2.166 -71.073 116.387

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.239	-19.297	1168.68100	-55.5	10.7	-81.4	33.3	24.62371	0.817	-89.3	68.9	39.8	31.5	28.3	0.	0-1
2	-12.000	-17.836	1195.63025	-57.9	11.4	-81.2	32.1	24.61309	0.818	-88.3	70.3	38.2	35.1	31.3	49.10057	1-2
3	-10.491	-19.973	1154.69998	-60.1	9.7	-80.1	31.1	23.15335	0.872	-85.6	68.1	40.6	29.5	27.0	78.23482	2-3
4	-10.263	-16.295	1210.07086	-65.9	11.1	-80.5	27.8	24.25616	0.801	-85.1	71.7	36.0	36.9	35.3	109.81253	3-4
5	-13.653	-15.407	1248.94969	-56.2	13.6	-82.8	33.1	25.04315	0.754	-91.3	72.9	35.8	41.2	35.6	106.00741	4-5
6	-13.725	-19.310	1188.58580	-49.4	11.6	-81.7	36.4	23.82563	0.828	-91.2	69.1	40.4	34.2	26.9	114.88479	5-6
7	-10.491	-19.973	1154.69998	-60.1	9.7	-80.1	31.1	23.15335	0.872	-85.6	68.1	40.6	29.5	27.0	99.90117	6-7

JULY 31, 1964 13 HR 17 MIN 53 SEC 601 MS TAB NO 22 ATLAS PHOTO NO 22 POD SEQUENCE NO 413

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

475.199 1039.46057 -5.858 -30.651 2774.916 2.173 -70.963 116.367

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.218	-19.340	1142.42078	-55.6	10.7	-81.4	33.3	23.49656	0.817	-89.3	68.8	39.9	31.4	28.2	0.	0-1
2	-11.980	-17.875	1169.37604	-57.9	11.4	-81.2	32.1	23.48560	0.818	-88.3	70.3	38.2	35.1	31.2	49.21392	1-2
3	-10.505	-19.965	1129.36100	-60.1	9.7	-80.1	31.1	22.64567	0.872	-85.6	68.1	40.6	29.5	27.0	76.49842	2-3
4	-10.281	-16.369	1183.44554	-65.8	11.1	-80.5	27.9	23.72248	0.802	-85.1	71.6	36.0	36.8	35.3	107.35627	3-4
5	-13.596	-15.504	1221.35863	-56.2	13.5	-82.8	33.0	24.48951	0.755	-91.3	72.8	35.9	41.1	35.5	103.62977	4-5
6	-13.667	-19.318	1162.46523	-49.4	11.6	-81.7	36.3	23.30206	0.828	-91.2	69.1	40.5	34.2	26.9	112.27876	5-6
7	-10.505	-19.965	1129.36100	-60.1	9.7	-80.1	31.1	22.64567	0.872	-85.6	68.1	40.6	29.5	27.0	97.68805	6-7

JULY 31, 1964 13 HR 18 MIN 3 SEC 000 MS TAB NO 23 ATLAS PHOTO NO 23 POD SEQUENCE NO 425

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

465.119 1018.73257 -5.924 -30.517 2754.188 2.179 -70.867 116.349

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.201	-19.377	1119.84976	-55.6	10.7	-81.4	33.3	23.04285	0.818	-89.3	68.8	39.9	31.3	28.1	0.	0-1
2	-11.963	-17.910	1146.78114	-57.9	11.4	-81.2	32.1	23.03200	0.819	-88.3	70.3	38.2	35.0	31.2	49.22603	1-2
3	-10.515	-19.959	1107.59366	-60.1	9.7	-80.1	31.1	22.20880	0.872	-85.6	68.1	40.6	29.5	27.0	75.00270	2-3
4	-10.296	-16.433	1160.53448	-65.8	11.1	-80.5	28.0	23.26325	0.802	-85.1	71.6	36.0	36.8	35.2	105.23922	3-4
5	-13.547	-15.589	1197.61449	-56.3	13.5	-82.7	33.0	24.01381	0.756	-91.3	72.7	35.9	41.0	35.4	101.58311	4-5
6	-13.616	-19.325	1139.98482	-49.5	11.6	-81.7	36.3	22.85145	0.829	-91.2	69.1	40.5	34.2	26.9	110.03710	5-6
7	-10.515	-19.959	1107.59366	-60.1	9.7	-80.1	31.1	22.20880	0.872	-85.6	68.1	40.6	29.5	27.0	95.78234	6-7

JULY 31, 1964 13 HR 18 MIN 17 SEC 119 MS TAB NO 24 ATLAS PHOTO NO 24 POD SEQUENCE NO 441

TRAJECTORY DATA SEC TO IMPACT ALT LAT LON R V PTH AZ

451.680 991.02271 -6.014 -30.335 2726.478 2.187 -70.737 116.324

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.177	-19.426	1089.66412	-55.6	10.6	-81.4	33.2	22.43495	0.819	-89.3	68.7	40.0	31.2	28.0	0.	0-1
2	-11.937	-17.960	1116.50911	-57.9	11.4	-81.2	32.1	22.42402	0.819	-88.3	70.2	38.2	35.0	31.1	49.22657	1-2
3	-10.528	-19.953	1078.40924	-60.1	9.7	-80.1	31.1	21.62361	0.872	-85.6	68.1	40.6	29.5	27.0	72.99606	2-3
4	-10.315	-16.523	1129.84186	-65.7	11.1	-80.4	28.0	22.64804	0.803	-85.1	71.5	36.0	36.7	35.1	102.40461	3-4
5	-13.479	-15.704	1165.80238	-56.3	13.4	-82.7	33.0	23.37594	0.758	-91.3	72.6	35.9	40.8	35.3	98.84002	4-5
6	-13.546	-19.338	1109.86723	-49.6	11.5	-81.7	36.2	22.24776	0.829	-91.2	69.1	40.5	34.1	26.9	107.03329	5-6
7	-10.528	-19.953	1078.40924	-60.1	9.7	-80.1	31.1	21.62361	0.872	-85.6	68.1	40.6	29.5	27.0	93.22802	6-7

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TAB NO 25 ATLAS PHOTO NO 25 POD SEQUENCE NO 453																
JULY 31,1964 13 HR 18 MIN 27 SEC 199 MS																
TRAJECTORY DATA					SEC TO IMPACT					ALT LAT LON R V PTH AZ						
					441.601					970.18549 -6.082 -30.196 2705.641 2.194 -70.639 116.305						
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.160	-19.463	1066.95615	-55.7	10.6	-81.4	33.2	21.97695	0.819	-89.3	68.7	40.0	31.1	27.9	0.	0-1
2	-11.918	-17.999	1093.70232	-57.9	11.3	-81.2	32.1	21.96597	0.820	-88.3	70.2	38.2	34.9	31.1	49.14218	1-2
3	-10.537	-19.951	1056.42393	-60.1	9.7	-80.1	31.1	21.18278	0.872	-85.6	68.2	40.6	29.5	27.0	71.48333	2-3
4	-10.329	-16.591	1106.71797	-65.7	11.1	-80.4	28.1	22.18454	0.804	-85.1	71.4	36.0	36.6	35.0	100.26804	3-4
5	-13.427	-15.793	1141.83778	-56.3	13.3	-82.7	33.0	22.89561	0.759	-91.3	72.5	35.9	40.7	35.2	96.77467	4-5
6	-13.494	-19.349	1087.17976	-49.7	11.4	-81.7	36.1	21.79301	0.830	-91.2	69.0	40.5	34.0	26.9	104.77036	5-6
7	-10.537	-19.951	1056.42393	-60.1	9.7	-80.1	31.1	21.18278	0.872	-85.6	68.2	40.6	29.5	27.0	91.30423	6-7
TAB NO 26 ATLAS PHOTO NO 26 POD SEQUENCE NO 465																
JULY 31,1964 13 HR 18 MIN 31 SEC 278 MS																
TRAJECTORY DATA					SEC TO IMPACT					ALT LAT LON R V PTH AZ						
					431.521					949.30011 -6.151 -30.055 2684.755 2.200 -70.538 116.286						
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.142	-19.500	1044.18787	-55.7	10.6	-81.4	33.2	21.51818	0.820	-89.3	68.7	40.1	31.0	27.9	0.	0-1
2	-11.898	-18.036	1070.85913	-57.9	11.3	-81.2	32.1	21.50718	0.820	-88.3	70.2	38.2	34.9	31.0	49.09749	1-2
3	-10.546	-19.946	1034.39633	-60.1	9.6	-80.1	31.1	20.74109	0.872	-85.6	68.2	40.6	29.5	27.0	69.97171	2-3
4	-10.342	-16.658	1083.56389	-65.6	11.1	-80.4	28.2	21.72043	0.805	-85.1	71.4	36.0	36.5	34.9	98.13511	3-4
5	-13.375	-15.880	1117.84866	-56.3	13.3	-82.7	32.9	22.41440	0.761	-91.3	72.4	35.9	40.6	35.1	94.70942	4-5
6	-13.443	-19.359	1064.45241	-49.8	11.4	-81.8	36.0	21.33745	0.830	-91.2	69.0	40.5	34.0	26.9	102.51335	5-6
7	-10.546	-19.946	1034.39633	-60.1	9.6	-80.1	31.1	20.74109	0.872	-85.6	68.2	40.6	29.5	27.0	89.37818	6-7
TAB NO 27 ATLAS PHOTO NO 27 POD SEQUENCE NO 475																
JULY 31,1964 13 HR 18 MIN 45 SEC 678 MS																
TRAJECTORY DATA					SEC TO IMPACT					ALT LAT LON R V PTH AZ						
					423.122					931.85895 -6.210 -29.936 2667.314 2.206 -70.454 116.270						
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.128	-19.530	1025.16826	-55.7	10.6	-81.4	33.1	21.13468	0.820	-89.3	68.6	40.1	30.9	27.8	0.	0-1
2	-11.881	-18.068	1051.76518	-58.0	11.3	-81.2	32.0	21.12368	0.821	-88.3	70.1	38.2	34.8	31.0	49.03762	1-2
3	-10.553	-19.943	1015.98275	-60.1	9.6	-80.1	31.1	20.37188	0.872	-85.6	68.2	40.6	29.5	27.0	68.70841	2-3
4	-10.353	-16.715	1084.20990	-65.6	11.1	-80.4	28.2	21.33249	0.805	-85.1	71.3	36.0	36.5	34.9	96.35287	3-4
5	-13.331	-15.953	1097.79971	-56.4	13.2	-82.7	32.9	22.01239	0.762	-91.3	72.3	35.9	40.5	35.0	92.98453	4-5
6	-13.396	-19.367	1045.45546	-49.8	11.4	-81.8	35.9	20.95666	0.831	-91.2	69.0	40.5	34.0	26.8	100.62843	5-6
7	-10.553	-19.943	1015.98275	-60.1	9.6	-80.1	31.1	20.37188	0.872	-85.6	68.2	40.6	29.5	27.0	87.76870	6-7
TAB NO 28 ATLAS PHOTO NO 28 POD SEQUENCE NO 489																
JULY 31,1964 13 HR 18 MIN 57 SEC 437 MS																
TRAJECTORY DATA					SEC TO IMPACT					ALT LAT LON R V PTH AZ						
					411.362					907.38403 -6.293 -29.766 2642.839 2.213 -70.334 116.246						
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.108	-19.573	998.46904	-55.7	10.5	-81.5	33.1	20.59529	0.821	-89.3	68.6	40.2	30.8	27.7	0.	0-1
2	-11.857	-18.115	1024.90894	-58.0	11.3	-81.2	32.0	20.58428	0.821	-88.3	70.1	38.2	34.8	30.9	48.86285	1-2
3	-10.564	-19.941	990.08439	-60.1	9.6	-80.1	31.2	19.85266	0.872	-85.6	68.2	40.6	29.4	27.0	66.92922	2-3
4	-10.369	-16.797	1036.98499	-65.5	11.0	-80.4	28.3	20.78679	0.806	-85.1	71.2	36.1	36.4	34.8	93.84235	3-4
5	-13.270	-16.958	1069.60007	-56.4	13.2	-82.7	32.9	21.44695	0.763	-91.3	72.2	35.9	40.4	34.9	90.55929	4-5
6	-13.333	-19.381	1018.74206	-49.9	11.3	-81.8	35.8	20.42120	0.831	-91.1	69.0	40.5	33.9	26.8	97.97416	5-6
7	-10.564	-19.941	990.08839	-60.1	9.6	-80.1	31.2	19.85266	0.872	-85.6	68.2	40.6	29.4	27.0	85.50589	6-7
TAB NO 29 ATLAS PHOTO NO 29 POD SEQUENCE NO 501																
JULY 31,1964 13 HR 19 MIN 7 SEC 516 MS																
TRAJECTORY DATA					SEC TO IMPACT					ALT LAT LON R V PTH AZ						
					401.283					886.35165 -6.366 -29.618 2621.807 2.220 -70.229 116.226						
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.091	-19.609	975.51646	-55.8	10.5	-81.5	33.1	20.13053	0.821	-89.3	68.5	40.2	30.7	27.6	0.	0-1
2	-11.837	-18.158	1001.76637	-58.0	11.2	-81.2	32.0	20.11952	0.822	-88.3	70.0	38.2	34.7	30.9	48.62115	1-2
3	-10.572	-19.943	967.78215	-60.0	9.6	-80.1	31.2	19.40539	0.872	-85.6	68.2	40.7	29.4	27.0	65.39407	2-3
4	-10.382	-16.871	1013.52924	-65.5	11.0	-80.3	28.3	20.31655	0.807	-85.1	71.2	36.1	36.3	34.7	91.67591	3-4
5	-13.216	-16.152	1045.30180	-56.4	13.1	-82.7	32.9	20.95974	0.765	-91.3	72.1	35.9	40.2	34.8	88.47024	4-5
6	-13.279	-19.397	995.73039	-50.0	11.3	-81.8	35.8	19.95995	0.832	-91.1	69.0	40.5	33.8	26.8	95.68441	5-6
7	-10.572	-19.943	967.78215	-60.0	9.6	-80.1	31.2	19.40539	0.872	-85.6	68.2	40.7	29.4	27.0	83.55686	6-7
TAB NO 30 ATLAS PHOTO NO 30 POD SEQUENCE NO 513																
JULY 31,1964 13 HR 19 MIN 17 SEC 596 MS																
TRAJECTORY DATA					SEC TO IMPACT					ALT LAT LON R V PTH AZ						
					391.204					865.26907 -6.439 -29.468 2600.724 2.227 -70.123 116.205						
PHOTO DATA																
PT	LAT	LONG	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-11.074	-19.645	952.50091	-55.8	10.5	-81.5	33.1	19.66428	0.822	-89.3	68.5	40.3	30.6	27.5	0.	0-1
2	-11.816	-18.202	978.55202	-58.0	11.2	-81.2	32.0	19.65328	0.823	-88.3	70.0	38.3	34.6	30.8	48.35894	1-2
3	-10.581	-19.944	945.40273	-60.0	9.6	-80.1	31.2	18.95665	0.872	-85.6	68.2	40.7	29.4	27.0	63.85504	2-3
4	-10.394	-16.945	989.99317	-65.4	11.0	-80.3	28.4	19.84487	0.808	-85.1	71.1	36.1	36.2	34.6	89.50493	3-4
5	-13.163	-16.246	1020.93320	-56.4	13.0	-82.6	32.9	20.47112	0.766	-91.3	72.0	35.9	40.1	34.7	86.37684	4-5
6	-13.224	-19.412	972.64606	-50.0	11.2	-81.8	35.7	19.49722	0.832	-91.1	69.0	40.5	33.8	26.8	93.39136	5-6
7	-10.581	-19.944	945.40273	-60.0	9.6	-80.1	31.2	18.95665	0.872	-85.6	68.2	40.7	29.4	27.0	81.60234	6-7

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TAB NO 31 ATLAS PHOTO NO 31 POD SEQUENCE NO 525														
JULY 31, 1964 13 HR 19 MIN 27 SEC 675 MS														
TRAJECTORY DATA														
SEC TO IMPACT 381.124 ALT 844.13583 LAT -6.514 LON -29.315 R 2579.591 V 2.234 PTH -70.015 AZ 116.184														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.057	-19.680	929.42180	-55.8	10.5	-81.5	33.0	19.19670	0.822	-89.3	68.5	40.3	30.5	27.4
2	-11.794	-18.246	955.27285	-58.0	11.2	-81.2	32.0	19.18574	0.823	-88.3	69.9	38.3	34.6	30.8
3	-10.589	-19.945	922.95712	-60.0	9.6	-80.1	31.2	18.50658	0.873	-85.6	68.2	40.7	29.4	27.0
4	-10.407	-17.019	966.39909	-65.4	11.0	-80.3	28.5	19.37194	0.809	-85.1	71.0	36.1	36.1	34.5
5	-13.109	-16.339	996.50579	-56.4	13.0	-82.6	32.8	19.98131	0.767	-91.3	71.9	36.0	40.0	34.5
6	-13.169	-19.427	949.49551	-50.1	11.2	-81.9	35.6	19.03319	0.833	-91.1	68.9	40.6	33.7	26.7
7	-10.589	-19.945	922.95712	-60.0	9.6	-80.1	31.2	18.50658	0.873	-85.6	68.2	40.7	29.4	27.0
TAB NO 32 ATLAS PHOTO NO 32 POD SEQUENCE NO 537														
JULY 31, 1964 13 HR 19 MIN 37 SEC 755 MS														
TRAJECTORY DATA														
SEC TO IMPACT 371.045 ALT 822.95C99 LAT -6.590 LON -29.159 R 2558.406 V 2.241 PTH -69.906 AZ 116.162														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.040	-19.716	906.27803	-55.8	10.4	-81.5	33.0	18.72837	0.823	-89.3	68.4	40.4	30.4	27.4
2	-11.770	-18.286	931.95988	-58.0	11.1	-81.2	32.0	18.71753	0.824	-88.3	69.9	38.3	34.5	30.7
3	-10.594	-19.943	900.47169	-60.0	9.6	-80.1	31.2	18.05572	0.873	-85.6	68.2	40.7	29.4	26.9
4	-10.417	-17.089	942.78609	-65.4	11.0	-80.3	28.5	18.89863	0.810	-85.1	71.0	36.1	36.1	34.4
5	-13.052	-16.429	972.05663	-56.5	12.9	-82.6	32.8	19.49108	0.769	-91.3	71.8	36.0	39.9	34.5
6	-13.111	-19.439	926.29999	-50.2	11.2	-81.9	35.5	18.56824	0.834	-91.1	68.9	40.6	33.7	26.7
7	-10.594	-19.943	900.47169	-60.0	9.6	-80.1	31.2	18.05572	0.873	-85.6	68.2	40.7	29.4	26.9
TAB NO 33 ATLAS PHOTO NO 33 POD SEQUENCE NO 547														
JULY 31, 1964 13 HR 19 MIN 46 SEC 154 MS														
TRAJECTORY DATA														
SEC TO IMPACT 362.645 ALT 805.25702 LAT -6.655 LON -29.027 R 2540.712 V 2.247 PTH -69.813 AZ 116.143														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.026	-19.745	886.94147	-55.9	10.4	-81.5	32.9	18.33727	0.823	-89.3	68.4	40.4	30.3	27.3
2	-11.750	-18.318	912.49242	-58.0	11.1	-81.2	32.0	18.32654	0.824	-88.3	69.9	38.3	34.5	30.7
3	-10.599	-19.940	881.69070	-60.0	9.6	-80.1	31.2	17.67913	0.873	-85.6	68.2	40.7	29.4	27.0
4	-10.425	-17.147	923.07236	-65.3	11.0	-80.3	28.5	18.50347	0.810	-85.1	70.9	36.1	36.0	34.4
5	-13.005	-16.503	951.64952	-56.5	12.9	-82.6	32.8	19.08188	0.770	-91.2	71.8	36.0	39.8	34.4
6	-13.063	-19.447	906.92856	-50.3	11.1	-81.9	35.4	18.17995	0.834	-91.1	68.9	40.6	33.6	26.7
7	-10.599	-19.940	881.69070	-60.0	9.6	-80.1	31.2	17.67913	0.873	-85.6	68.2	40.7	29.4	27.0
TAB NO 34 ATLAS PHOTO NO 34 POD SEQUENCE NO 555														
JULY 31, 1964 13 HR 19 MIN 52 SEC 874 MS														
TRAJECTORY DATA														
SEC TO IMPACT 355.926 ALT 791.07562 LAT -6.707 LON -28.920 R 2526.531 V 2.252 PTH -69.738 AZ 116.128														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-11.015	-19.768	871.43929	-55.9	10.4	-81.5	32.9	18.02427	0.824	-89.3	68.4	40.5	30.3	27.2
2	-11.735	-18.343	896.91342	-58.1	11.1	-81.2	31.9	18.01365	0.825	-88.3	69.8	38.3	34.5	30.7
3	-10.603	-19.936	866.65455	-60.1	9.6	-80.1	31.1	17.37764	0.873	-85.6	68.2	40.7	29.4	27.0
4	-10.432	-17.191	907.30080	-65.3	11.0	-80.3	28.6	18.18734	0.810	-85.1	70.9	36.1	36.0	34.3
5	-12.967	-16.560	935.32892	-56.5	12.8	-82.6	32.7	18.75463	0.770	-91.2	71.7	36.0	39.7	34.3
6	-13.024	-19.453	891.42355	-50.3	11.1	-81.9	35.3	17.86915	0.834	-91.1	68.9	40.6	33.6	26.7
7	-10.603	-19.936	866.65459	-60.1	9.6	-80.1	31.1	17.37764	0.873	-85.6	68.2	40.7	29.4	27.0
TAB NO 35 ATLAS PHOTO NO 35 POD SEQUENCE NO 567														
JULY 31, 1964 13 HR 20 MIN 2 SEC 953 MS														
TRAJECTORY DATA														
SEC TO IMPACT 345.846 ALT 769.75885 LAT -6.786 LON -28.758 R 2505.214 V 2.259 PTH -69.625 AZ 116.105														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-10.998	-19.803	848.13006	-56.0	10.4	-81.5	32.9	17.55242	0.824	-89.3	68.4	40.5	30.2	27.1
2	-11.711	-18.382	873.42723	-58.1	11.1	-81.2	31.9	17.54195	0.825	-88.3	69.8	38.3	34.4	30.6
3	-10.609	-19.934	843.99305	-60.1	9.6	-80.1	31.1	16.92324	0.873	-85.6	68.2	40.7	29.4	27.0
4	-10.443	-17.261	865.51918	-65.3	11.0	-80.3	28.6	17.71064	0.811	-85.1	70.8	36.1	35.9	34.3
5	-12.911	-16.649	910.72056	-56.6	12.8	-82.6	32.7	18.26120	0.772	-91.2	71.6	36.0	39.6	34.2
6	-12.966	-19.464	868.05578	-50.4	11.1	-81.9	35.2	17.40075	0.835	-91.1	68.9	40.6	33.6	26.7
7	-10.609	-19.934	843.99305	-60.1	9.6	-80.1	31.1	16.92324	0.873	-85.6	68.2	40.7	29.4	27.0
TAB NO 36 ATLAS PHOTO NO 36 POD SEQUENCE NO 575														
JULY 31, 1964 13 HR 20 MIN 9 SEC 673 MS														
TRAJECTORY DATA														
SEC TO IMPACT 339.127 ALT 755.51791 LAT -6.839 LON -28.648 R 2490.973 V 2.264 PTH -69.548 AZ 116.089														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
1	-10.987	-19.826	832.55323	-56.0	10.4	-81.5	32.8	17.23608	0.825	-89.3	68.3	40.6	30.1	27.1
2	-11.695	-18.412	857.68088	-58.1	11.0	-81.2	31.9	17.22570	0.826	-88.3	69.8	38.3	34.4	30.6
3	-10.612	-19.935	828.80516	-60.1	9.6	-80.1	31.1	16.61870	0.873	-85.6	68.2	40.7	29.4	27.0
4	-10.450	-17.311	867.57022	-65.3	10.9	-80.2	28.6	17.39055	0.812	-85.1	70.7	36.1	35.9	34.2
5	-12.873	-16.712	894.21741	-56.6	12.7	-82.6	32.7	17.93029	0.772	-91.2	71.5	36.0	39.5	34.2
6	-12.927	-19.474	852.39456	-50.5	11.0	-81.9	35.2	17.08682	0.835	-91.1	68.9	40.6	33.5	26.7
7	-10.612	-19.935	828.80516	-60.1	9.6	-80.1	31.1	16.61870	0.873	-85.6	68.2	40.7	29.4	27.0

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JULY 31, 1964 13 HR 20 MIN 16 SEC 392 MS TAB NO 37 ATLAS PHOTO NO 37 POD SEQUENCE NO 583

TRAJECTORY DATA SEC TO IMPACT 332.407 ALT 741.25278 LAT -6.893 LON -28.537 R 2476.708 V 2.269 PTH -69.471 AZ 116.074

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.977	-19.849	816.94598	-56.0	10.3	-81.5	32.8	16.91906	0.825	-89.3	68.3	40.6	30.0	27.0	0.	0-1
2	-11.679	-18.442	841.90123	-58.1	11.0	-81.2	31.9	16.90878	0.826	-88.3	69.7	38.3	34.3	30.6	46.88726	1-2
3	-10.616	-19.736	813.58335	-60.1	9.6	-80.1	31.1	16.31348	0.873	-85.6	68.2	40.7	29.4	26.9	54.83739	2-3
4	-10.457	-17.362	851.58773	-65.2	10.9	-80.2	28.7	17.07059	0.812	-85.1	70.7	36.1	35.8	34.2	76.82719	3-4
5	-12.634	-16.775	877.68356	-56.6	12.7	-82.6	32.6	17.59877	0.773	-91.2	71.5	36.0	39.5	34.1	74.09521	4-5
6	-12.888	-19.485	836.70117	-50.6	11.0	-82.0	35.1	16.77225	0.835	-91.1	68.9	40.6	33.5	26.7	80.03080	5-6
7	-10.616	-19.936	813.58335	-60.1	9.6	-80.1	31.1	16.31348	0.873	-85.6	68.2	40.7	29.4	26.9	70.10212	6-7

JULY 31, 1964 13 HR 20 MIN 23 SEC 112 MS TAB NO 38 ATLAS PHOTO NO 38 POD SEQUENCE NO 591

TRAJECTORY DATA SEC TO IMPACT 325.688 ALT 726.96317 LAT -6.948 LON -28.424 R 2462.418 V 2.274 PTH -69.392 AZ 116.057

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.966	-19.872	801.30812	-56.0	10.3	-81.5	32.8	16.60142	0.825	-89.3	68.3	40.7	30.0	27.0	0.	0-1
2	-11.663	-18.472	826.09038	-58.1	11.0	-81.2	31.9	16.59124	0.826	-88.3	69.7	38.3	34.3	30.5	46.63153	1-2
3	-10.620	-19.938	798.32919	-60.1	9.6	-80.1	31.1	16.00762	0.873	-85.6	68.2	40.7	29.4	26.9	53.79527	2-3
4	-10.463	-17.412	835.57362	-65.2	10.9	-80.2	28.7	16.74959	0.813	-85.1	70.6	36.1	35.8	34.1	75.36146	3-4
5	-12.796	-16.838	861.12185	-56.6	12.6	-82.6	32.6	17.26668	0.774	-91.2	71.4	36.0	39.4	34.0	72.67969	4-5
6	-12.849	-19.495	820.97803	-50.6	11.0	-82.0	35.0	16.45708	0.836	-91.1	68.8	40.6	33.4	26.7	78.48927	5-6
7	-10.620	-19.938	798.32919	-60.1	9.6	-80.1	31.1	16.00762	0.873	-85.6	68.2	40.7	29.4	26.9	68.77464	6-7

JULY 31, 1964 13 HR 20 MIN 29 SEC 831 MS TAB NO 39 ATLAS PHOTO NO 39 POD SEQUENCE NO 599

TRAJECTORY DATA SEC TO IMPACT 318.968 ALT 712.64911 LAT -7.003 LON -28.310 R 2448.104 V 2.279 PTH -69.313 AZ 116.041

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.955	-19.895	785.61950	-56.0	10.3	-81.5	32.8	16.28316	0.826	-89.3	68.3	40.7	29.9	26.9	0.	0-1
2	-11.647	-18.501	810.24878	-58.1	11.0	-81.2	31.9	16.27307	0.827	-88.2	69.7	38.3	34.2	30.5	46.37456	1-2
3	-10.624	-19.939	783.04334	-60.1	9.6	-80.1	31.1	15.70111	0.873	-85.6	68.2	40.7	29.4	26.9	52.75202	2-3
4	-10.470	-17.462	819.53005	-65.2	10.9	-80.2	28.8	16.42800	0.813	-85.1	70.6	36.1	35.7	34.1	73.89472	3-4
5	-12.758	-16.901	844.53246	-56.6	12.6	-82.5	32.6	16.93404	0.775	-91.2	71.4	36.0	39.3	34.0	71.26239	4-5
6	-12.810	-19.505	805.22389	-50.7	10.9	-82.0	35.0	16.14129	0.836	-91.1	68.8	40.6	33.4	26.7	76.94747	5-6
7	-10.624	-19.939	783.04334	-60.1	9.6	-80.1	31.1	15.70111	0.873	-85.6	68.2	40.7	29.4	26.9	67.44482	6-7

JULY 31, 1964 13 HR 20 MIN 36 SEC 551 MS TAB NO 40 ATLAS PHOTO NO 40 POD SEQUENCE NO 607

TRAJECTORY DATA SEC TO IMPACT 312.248 ALT 698.31021 LAT -7.059 LON -28.195 R 2433.766 V 2.284 PTH -69.233 AZ 116.024

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.945	-19.917	769.93970	-56.1	10.3	-81.5	32.7	15.94503	0.826	-89.3	68.2	40.7	29.8	26.8	0.	0-1
2	-11.631	-18.528	794.41470	-58.1	11.0	-81.2	31.9	15.95506	0.827	-88.2	69.7	38.3	34.2	30.5	46.18440	1-2
3	-10.624	-19.937	767.75680	-60.1	9.6	-80.1	31.1	15.39460	0.873	-85.6	68.2	40.7	29.4	26.9	51.71330	2-3
4	-10.478	-17.509	803.49991	-65.1	10.9	-80.2	28.8	16.10668	0.814	-85.1	70.6	36.1	35.7	34.0	72.43541	3-4
5	-12.720	-16.961	827.96285	-56.6	12.6	-82.5	32.6	16.60180	0.776	-91.2	71.3	36.0	39.2	33.9	69.84888	4-5
6	-12.771	-19.513	789.47305	-50.7	10.9	-82.0	34.9	15.82556	0.836	-91.1	68.8	40.6	33.4	26.7	75.41492	5-6
7	-10.628	-19.937	767.75680	-60.1	9.6	-80.1	31.1	15.39460	0.873	-85.6	68.2	40.7	29.4	26.9	66.11668	6-7

JULY 31, 1964 13 HR 20 MIN 44 SEC 951 MS TAB NO 41 ATLAS PHOTO NO 41 POD SEQUENCE NO 617

TRAJECTORY DATA SEC TO IMPACT 303.849 ALT 680.35129 LAT -7.130 LON -28.049 R 2415.807 V 2.291 PTH -69.132 AZ 116.003

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.931	-19.945	750.27064	-56.1	10.3	-81.5	32.7	15.56636	0.826	-89.3	68.2	40.8	29.7	26.8	0.	0-1
2	-11.611	-18.562	774.57310	-58.2	11.0	-81.2	31.8	15.55656	0.827	-88.2	69.6	38.3	34.2	30.4	45.93670	1-2
3	-10.635	-19.935	748.59925	-60.1	9.6	-80.1	31.1	15.01046	0.873	-85.6	68.2	40.7	29.4	26.9	50.41265	2-3
4	-10.486	-17.569	803.41460	-65.1	10.9	-80.2	28.8	15.70407	0.814	-85.1	70.5	36.1	35.6	34.0	70.60878	3-4
5	-12.672	-17.036	807.20480	-56.7	12.5	-82.5	32.5	16.18557	0.777	-91.2	71.2	36.0	39.1	33.8	68.07894	4-5
6	-12.723	-19.522	769.73550	-50.8	10.9	-82.0	34.8	15.42992	0.837	-91.1	68.8	40.6	33.3	26.7	73.49751	5-6
7	-10.633	-19.935	748.59925	-60.1	9.6	-80.1	31.1	15.01046	0.873	-85.6	68.2	40.7	29.4	26.9	64.45267	6-7

JULY 31, 1964 13 HR 20 MIN 49 SEC 990 MS TAB NO 42 ATLAS PHOTO NO 42 POD SEQUENCE NO 623

TRAJECTORY DATA SEC TO IMPACT 298.809 ALT 669.55710 LAT -7.173 LON -27.960 R 2405.012 V 2.295 PTH -69.070 AZ 115.990

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.924	-19.961	738.44553	-56.1	10.3	-81.5	32.7	15.32737	0.827	-89.3	68.2	40.8	29.7	26.7	0.	0-1
2	-11.598	-18.580	762.67951	-58.2	10.9	-81.2	31.8	15.31769	0.828	-88.2	69.6	38.3	34.2	30.4	45.84858	1-2
3	-10.636	-19.932	737.10906	-60.1	9.6	-80.1	31.1	14.78007	0.873	-85.6	68.2	40.7	29.4	27.0	49.63625	2-3
4	-10.491	-17.602	771.38067	-65.1	10.9	-80.2	28.9	15.46284	0.814	-85.1	70.5	36.1	35.6	33.9	69.51992	3-4
5	-12.644	-17.077	794.77155	-56.7	12.5	-82.5	32.5	15.93627	0.777	-91.2	71.2	36.0	39.1	33.8	67.01999	4-5
6	-12.693	-19.525	757.89977	-50.9	10.9	-82.0	34.8	15.19267	0.837	-91.1	68.8	40.6	33.3	26.7	72.35560	5-6
7	-10.636	-19.932	737.10906	-60.1	9.6	-80.1	31.1	14.78007	0.873	-85.6	68.2	40.7	29.4	27.0	63.45553	6-7

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JULY 31, 1964 13 HR 20 MIN 56 SEC 710 MS

TAB NO 43 ATLAS PHOTO NO 43 POD SEQUENCE NO 631

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
292.090 655.14209 -7.231 -27.840 2390.597 2.300 -68.988 115.972

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.913	-19.983	722.65022	-56.2	10.3	-81.5	32.6	15.00788	0.827	-89.3	68.2	40.9	29.6	26.7	0.	0-1
2	-11.582	-18.604	746.77943	-58.2	10.9	-81.2	31.8	14.99835	0.828	-88.2	69.6	38.3	34.1	30.4	45.70652	1-2
3	-10.640	-19.928	721.74859	-60.1	9.6	-80.1	31.1	14.47207	0.873	-85.6	68.2	40.7	29.4	27.0	48.59819	2-3
4	-10.498	-17.646	755.29289	-65.1	10.9	-80.2	28.9	15.14036	0.815	-85.1	70.4	36.1	35.6	33.9	68.06413	3-4
5	-12.605	-17.134	778.15131	-56.7	12.5	-82.5	32.5	15.40301	0.778	-91.2	71.1	36.0	39.0	33.8	65.60477	4-5
6	-12.653	-19.530	742.07818	-50.9	10.9	-82.0	34.7	14.87552	0.837	-91.1	68.8	40.6	33.3	26.7	70.82924	5-6
7	-10.640	-19.928	721.74859	-60.1	9.6	-80.1	31.1	14.47207	0.873	-85.6	68.2	40.7	29.4	27.0	62.12295	6-7

JULY 31, 1964 13 HR 21 MIN 1 SEC 750 MS

TAB NO 44 ATLAS PHOTO NO 44 POD SEQUENCE NO 637

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
287.050 644.31427 -7.274 -27.750 2379.770 2.304 -68.925 115.959

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.906	-20.000	710.76294	-56.2	10.3	-81.5	32.6	14.76720	0.827	-89.3	68.2	40.9	29.5	26.6	0.	0-1
2	-11.570	-18.624	734.80110	-58.2	10.9	-81.2	31.8	14.75778	0.828	-88.2	69.6	38.3	34.1	30.4	45.54222	1-2
3	-10.643	-19.927	710.17995	-60.1	9.6	-80.1	31.1	14.24010	0.872	-85.5	68.2	40.7	29.4	27.0	47.81455	2-3
4	-10.503	-17.682	743.16899	-65.1	10.9	-80.1	28.9	14.89734	0.815	-85.1	70.4	36.1	35.5	33.9	66.96374	3-4
5	-12.576	-17.179	765.62780	-56.8	12.4	-82.5	32.4	15.35189	0.778	-91.2	71.1	36.0	39.0	33.7	64.53895	4-5
6	-12.624	-19.536	730.16365	-51.0	10.8	-82.0	34.6	14.63669	0.837	-91.1	68.8	40.6	33.3	26.7	69.67568	5-6
7	-10.643	-19.927	710.17995	-60.1	9.6	-80.1	31.1	14.24010	0.872	-85.5	68.2	40.7	29.4	27.0	61.11972	6-7

JULY 31, 1964 13 HR 21 MIN 10 SEC 149 MS

TAB NO 45 ATLAS PHOTO NO 45 POD SEQUENCE NO 647

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
278.650 626.23560 -7.348 -27.597 2361.691 2.311 -68.819 115.936

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.893	-20.027	690.96346	-56.2	10.3	-81.5	32.6	14.36439	0.827	-89.3	68.1	41.0	29.5	26.5	0.	0-1
2	-11.549	-18.661	714.75506	-58.2	10.9	-81.2	31.8	14.35513	0.828	-88.2	69.5	38.3	34.1	30.4	45.19011	1-2
3	-10.648	-19.927	690.82103	-60.1	9.6	-80.1	31.1	13.85193	0.872	-85.5	68.2	40.7	29.4	27.0	46.50144	2-3
4	-10.512	-17.745	722.87302	-65.0	10.9	-80.1	28.9	14.49050	0.816	-85.1	70.3	36.1	35.5	33.8	65.11823	3-4
5	-12.528	-17.257	744.66590	-56.8	12.4	-82.5	32.4	14.93157	0.779	-91.2	71.0	36.0	38.9	33.6	62.75580	4-5
6	-12.575	-19.547	710.22795	-51.1	10.8	-82.1	34.6	14.23707	0.838	-91.1	68.8	40.6	33.3	26.7	67.74142	5-6
7	-10.648	-19.927	690.82103	-60.1	9.6	-80.1	31.1	13.85193	0.872	-85.5	68.2	40.7	29.4	27.0	59.44189	6-7

JULY 31, 1964 13 HR 21 MIN 16 SEC 869 MS

TAB NO 46 ATLAS PHOTO NO 46 POD SEQUENCE NO 655

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
271.931 611.74298 -7.408 -27.472 2347.198 2.316 -68.734 115.918

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.883	-20.048	675.07056	-56.3	10.2	-81.5	32.5	14.04124	0.828	-89.3	68.1	41.0	29.4	26.5	0.	0-1
2	-11.533	-18.690	698.67043	-58.2	10.9	-81.2	31.7	14.03213	0.829	-88.2	69.5	38.3	34.0	30.3	44.89425	1-2
3	-10.652	-19.928	675.26980	-60.1	9.6	-80.1	31.1	13.54050	0.872	-85.5	68.2	40.7	29.4	27.0	45.44876	2-3
4	-10.519	-17.795	706.59302	-65.0	10.9	-80.1	29.0	14.16417	0.816	-85.1	70.3	36.1	35.4	33.8	63.63924	3-4
5	-12.489	-17.319	727.65341	-56.8	12.4	-82.5	32.4	14.59446	0.780	-91.2	70.9	36.0	38.8	33.6	61.32645	4-5
6	-12.535	-19.597	694.23535	-51.1	10.8	-82.1	34.5	13.91650	0.838	-91.1	68.8	40.6	33.2	26.7	66.19200	5-6
7	-10.652	-19.928	675.26980	-60.1	9.6	-80.1	31.1	13.54050	0.872	-85.5	68.2	40.7	29.4	27.0	58.09621	6-7

JULY 31, 1964 13 HR 21 MIN 23 SEC 588 MS

TAB NO 47 ATLAS PHOTO NO 47 POD SEQUENCE NO 663

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
265.211 597.22394 -7.469 -27.347 2332.679 2.322 -68.641 115.897

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.873	-20.069	659.14451	-56.3	10.2	-81.5	32.5	13.71733	0.828	-89.3	68.1	41.1	29.3	26.4	0.	0-1
2	-11.517	-18.719	682.55017	-58.3	10.9	-81.1	31.7	13.70837	0.829	-88.2	69.5	38.3	34.0	30.3	44.58857	1-2
3	-10.656	-19.928	659.72070	-60.1	9.6	-80.1	31.1	13.22832	0.872	-85.5	68.2	40.7	29.4	27.0	44.39434	2-3
4	-10.526	-17.845	690.27651	-65.0	10.9	-80.1	29.0	13.83710	0.816	-85.1	70.2	36.1	35.4	33.7	62.15832	3-4
5	-12.450	-17.381	711.00589	-56.8	12.3	-82.5	32.4	14.25665	0.781	-91.2	70.9	36.0	38.8	33.5	59.89479	4-5
6	-12.496	-19.567	678.20508	-51.2	10.8	-82.1	34.4	13.59517	0.838	-91.1	68.7	40.5	33.2	26.7	64.64122	5-6
7	-10.656	-19.928	659.72070	-60.1	9.6	-80.1	31.1	13.22832	0.872	-85.5	68.2	40.7	29.4	27.0	56.74782	6-7

JULY 31, 1964 13 HR 21 MIN 28 SEC 628 MS

TAB NO 48 ATLAS PHOTO NO 48 POD SEQUENCE NO 669

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
260.171 586.31717 -7.515 -27.251 2321.772 2.326 -68.582 115.885

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.865	-20.085	647.17799	-56.3	10.2	-81.5	32.5	13.47375	0.828	-89.3	68.1	41.1	29.2	26.4	0.	0-1
2	-11.504	-18.742	670.42805	-58.3	10.9	-81.1	31.7	13.46451	0.829	-88.2	69.4	38.3	34.0	30.3	44.34039	1-2
3	-10.659	-19.929	648.01300	-60.1	9.6	-80.1	31.1	12.99356	0.872	-85.5	68.2	40.7	29.4	27.0	43.60147	2-3
4	-10.531	-17.883	678.00709	-65.0	10.9	-80.1	29.0	13.59116	0.817	-85.1	70.2	36.1	35.4	33.7	61.04490	3-4
5	-12.421	-17.429	698.33818	-56.8	12.3	-82.5	32.3	14.00264	0.781	-91.2	70.8	35.9	38.7	33.5	58.81873	4-5
6	-12.466	-19.574	666.15112	-51.2	10.8	-82.1	34.4	13.35354	0.838	-91.1	68.7	40.5	33.2	26.7	63.47555	5-6
7	-10.659	-19.929	648.01300	-60.1	9.6	-80.1	31.1	12.99356	0.872	-85.5	68.2	40.7	29.4	27.0	55.73403	6-7

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JULY 31, 1964 13 HR 21 MIN 37 SEC 27 MS TAB NO 49 ATLAS PHOTO NO 49 POD SEQUENCE NO 679

TRAJECTORY DATA SEC TO IMPACT 251.772 ALT 568.10608 LAT -7.592 LON -27.090 R 2303.561 V 2.333 PTH -68.471 AZ 115.860

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.853	-20.111	627.19209	-56.3	10.2	-81.5	32.5	13.06589	0.829	-89.2	68.1	41.2	29.1	26.3	0.	0-1
2	-11.483	-18.783	650.12974	-58.3	10.8	-81.1	31.7	13.05723	0.830	-88.2	69.4	38.3	33.9	30.3	43.82974	1-2
3	-10.663	-19.934	628.41340	-60.1	9.6	-80.1	31.1	12.60057	0.872	-85.5	68.2	40.7	29.4	27.0	42.27144	2-3
4	-10.539	-17.950	657.45921	-64.9	10.9	-80.1	29.1	13.17927	0.817	-85.1	70.1	36.1	35.3	33.6	59.17678	3-4
5	-12.372	-17.511	677.12302	-56.9	12.2	-82.5	32.3	13.57725	0.782	-91.2	70.7	35.9	38.6	33.4	57.01633	4-5
6	-12.415	-19.590	645.97124	-51.3	10.7	-82.1	34.3	12.94903	0.839	-91.1	68.7	40.5	33.1	26.7	61.51990	5-6
7	-10.663	-19.934	628.41340	-60.1	9.6	-80.1	31.1	12.60057	0.872	-85.5	68.2	40.7	29.4	27.0	54.03662	6-7

JULY 31, 1964 13 HR 21 MIN 43 SEC 747 MS TAB NO 50 ATLAS PHOTO NO 50 POD SEQUENCE NO 687

TRAJECTORY DATA SEC TO IMPACT 245.052 ALT 553.50620 LAT -7.655 LON -26.959 R 2288.961 V 2.339 PTH -68.382 AZ 115.840

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.844	-20.131	611.16434	-56.4	10.2	-81.5	32.4	12.73848	0.829	-89.2	68.0	41.2	29.1	26.2	0.	0-1
2	-11.465	-18.816	633.83543	-58.3	10.8	-81.1	31.7	12.72998	0.830	-88.2	69.4	38.3	33.9	30.2	43.38895	1-2
3	-10.666	-19.938	612.67963	-60.1	9.6	-80.1	31.1	12.28508	0.872	-85.5	68.2	40.7	29.4	27.0	41.20403	2-3
4	-10.545	-18.004	640.96521	-64.9	10.9	-80.0	29.1	12.84865	0.818	-85.0	70.1	36.1	35.3	33.6	57.67769	3-4
5	-12.332	-17.577	660.09538	-56.9	12.2	-82.5	32.3	13.23582	0.783	-91.2	70.7	35.9	38.5	33.3	55.57051	4-5
6	-12.374	-19.603	629.77274	-51.4	10.7	-82.1	34.2	12.62433	0.839	-91.1	68.7	40.5	33.1	26.7	59.95117	5-6
7	-10.666	-19.938	612.67963	-60.1	9.6	-80.1	31.1	12.28508	0.872	-85.5	68.2	40.7	29.4	27.0	52.67460	6-7

JULY 31, 1964 13 HR 21 MIN 50 SEC 467 MS TAB NO 51 ATLAS PHOTO NO 51 POD SEQUENCE NO 695

TRAJECTORY DATA SEC TO IMPACT 238.333 ALT 538.87900 LAT -7.719 LON -26.827 R 2274.334 V 2.345 PTH -68.291 AZ 115.820

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.834	-20.151	595.10233	-56.4	10.2	-81.5	32.4	12.41011	0.829	-89.2	68.0	41.3	29.0	26.1	0.	0-1
2	-11.450	-18.850	617.44229	-58.3	10.8	-81.1	31.7	12.40174	0.830	-88.2	69.3	38.3	33.9	30.2	42.92051	1-2
3	-10.671	-19.943	596.89704	-60.1	9.6	-80.0	31.1	11.96862	0.872	-85.5	68.2	40.7	29.4	27.0	40.13416	2-3
4	-10.553	-18.060	624.41658	-64.8	10.9	-80.0	29.2	12.51693	0.818	-85.0	70.0	36.1	35.2	33.5	56.17217	3-4
5	-12.293	-17.645	643.02077	-56.9	12.2	-82.4	32.3	12.89345	0.784	-91.2	70.6	35.9	38.5	33.3	54.12339	4-5
6	-12.335	-19.617	613.53196	-51.4	10.7	-82.1	34.2	12.29877	0.839	-91.1	68.7	40.5	33.1	26.6	58.37701	5-6
7	-10.671	-19.943	596.89704	-60.1	9.6	-80.0	31.1	11.96862	0.872	-85.5	68.2	40.7	29.4	27.0	51.31116	6-7

JULY 31, 1964 13 HR 21 MIN 55 SEC 506 MS TAB NO 52 ATLAS PHOTO NO 52 POD SEQUENCE NO 701

TRAJECTORY DATA SEC TO IMPACT 233.293 ALT 527.89053 LAT -7.767 LON -26.726 R 2263.346 V 2.350 PTH -68.223 AZ 115.805

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.827	-20.166	583.03298	-56.4	10.2	-81.5	32.4	12.16318	0.830	-89.2	68.0	41.3	28.9	26.1	0.	0-1
2	-11.437	-18.877	605.20242	-58.3	10.8	-81.1	31.7	12.15491	0.831	-88.2	69.3	38.3	33.8	30.2	42.55014	1-2
3	-10.675	-19.947	585.02843	-60.1	9.6	-80.0	31.1	11.73064	0.872	-85.5	68.2	40.7	29.4	27.0	39.32979	2-3
4	-10.559	-18.102	611.97285	-64.8	10.9	-80.0	29.2	12.26749	0.819	-85.0	70.0	36.1	35.2	33.5	55.04052	3-4
5	-12.264	-17.696	630.18245	-56.9	12.2	-82.4	32.3	12.63603	0.785	-91.2	70.5	35.9	38.4	33.2	53.03563	4-5
6	-12.305	-19.628	601.31921	-51.4	10.7	-82.1	34.2	12.05397	0.839	-91.1	68.7	40.5	33.1	26.6	57.19407	5-6
7	-10.675	-19.947	585.02843	-60.1	9.6	-80.0	31.1	11.73064	0.872	-85.5	68.2	40.7	29.4	27.0	50.28591	6-7

JULY 31, 1964 13 HR 22 MIN 5 SEC 586 MS TAB NO 53 ATLAS PHOTO NO 53 POD SEQUENCE NO 713

TRAJECTORY DATA SEC TO IMPACT 223.214 ALT 505.86652 LAT -7.864 LON -26.522 R 2241.322 V 2.359 PTH -68.083 AZ 115.773

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.813	-20.196	558.83507	-56.4	10.2	-81.5	32.4	11.66693	0.830	-89.2	68.0	41.4	28.8	26.0	0.	0-1
2	-11.412	-18.733	580.50623	-58.3	10.8	-81.1	31.7	11.65887	0.831	-88.2	69.3	38.3	33.8	30.1	41.69851	1-2
3	-10.681	-19.959	561.18089	-60.1	9.6	-80.0	31.1	11.25246	0.873	-85.5	68.2	40.7	29.4	27.0	37.71137	2-3
4	-10.570	-18.190	586.96412	-64.7	10.9	-80.0	29.3	11.76618	0.820	-85.0	69.9	36.1	35.1	33.4	52.76384	3-4
5	-12.205	-17.802	604.38066	-56.9	12.1	-82.4	32.3	12.11867	0.786	-91.2	70.4	36.0	38.3	33.1	50.84953	4-5
6	-12.245	-19.653	576.77943	-51.5	10.6	-82.1	34.1	11.56206	0.840	-91.1	68.6	40.5	33.0	26.6	54.81456	5-6
7	-10.681	-19.959	561.18089	-60.1	9.6	-80.0	31.1	11.25246	0.873	-85.5	68.2	40.7	29.4	27.0	48.22580	6-7

JULY 31, 1964 13 HR 22 MIN 12 SEC 305 MS TAB NO 54 ATLAS PHOTO NO 54 POD SEQUENCE NO 721

TRAJECTORY DATA SEC TO IMPACT 216.494 ALT 491.14847 LAT -7.931 LON -26.384 R 2226.604 V 2.365 PTH -67.989 AZ 115.752

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
1	-10.804	-20.215	542.65865	-56.4	10.2	-81.5	32.4	11.33463	0.831	-89.2	68.0	41.4	28.7	25.9	0.	0-1
2	-11.395	-18.971	563.96601	-58.3	10.8	-81.1	31.7	11.32672	0.832	-88.2	69.2	38.3	33.7	30.1	41.07609	1-2
3	-10.685	-19.968	545.21288	-60.0	9.6	-80.0	31.2	10.93228	0.873	-85.5	68.2	40.7	29.4	27.0	36.62735	2-3
4	-10.577	-18.250	570.21855	-64.7	10.9	-80.0	29.4	11.43051	0.820	-85.0	69.9	36.1	35.0	33.3	51.23942	3-4
5	-12.165	-17.874	587.10529	-56.9	12.1	-82.4	32.3	11.77227	0.787	-91.2	70.4	36.0	38.2	33.0	49.38629	4-5
6	-12.204	-19.671	560.34829	-51.5	10.6	-82.1	34.0	11.23269	0.840	-91.1	68.6	40.6	33.0	26.6	53.22175	5-6
7	-10.685	-19.968	545.21288	-60.0	9.6	-80.0	31.2	10.93228	0.873	-85.5	68.2	40.7	29.4	27.0	46.84654	6-7

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JULY 31, 1964 13 HR 22 MIN 17 SEC 345 MS TAB NO 55 ATLAS PHOTO NO 55 POD SEQUENCE NO 727

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				211.454	480.09122	-7.981	-26.279	2215.547	2.369	-67.918	115.735					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-10.797	-20.229	530.50275	-56.4	10.2	-81.5	32.4	11.08482	0.831	-89.2	67.9	41.5	28.7	25.9	0	0-1
2	-11.382	-19.000	551.53338	-58.3	10.8	-81.1	31.7	11.07702	0.832	-88.2	69.2	38.3	33.7	30.0	40.59733	1-2
3	-10.687	-19.975	533.20786	-60.0	9.6	-80.0	31.2	10.69156	0.873	-85.5	68.2	40.7	29.4	26.9	35.81294	2-3
4	-10.581	-18.296	557.63134	-64.6	10.9	-80.0	29.4	11.17820	0.821	-85.0	69.8	36.1	35.0	33.3	50.09460	3-4
5	-12.134	-17.928	574.12108	-56.2	12.0	-82.4	32.3	11.51192	0.788	-91.2	70.2	36.0	38.1	32.9	48.28679	4-5
6	-12.173	-19.685	547.99574	-51.6	10.6	-82.1	34.0	10.98508	0.841	-91.1	68.6	40.6	32.9	26.6	52.02599	5-6
7	-10.687	-19.975	533.20786	-60.0	9.6	-80.0	31.2	10.69156	0.873	-85.5	68.2	40.7	29.4	26.9	45.80975	6-7

JULY 31, 1964 13 HR 22 MIN 24 SEC 65 MS TAB NO 56 ATLAS PHOTO NO 56 POD SEQUENCE NO 735

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				204.735	465.32339	-8.048	-26.137	2200.779	2.376	-67.822	115.713					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-10.789	-20.248	514.26358	-56.4	10.2	-81.5	32.4	10.75089	0.832	-89.2	67.9	41.5	28.6	25.8	0	0-1
2	-11.364	-19.039	534.91451	-58.3	10.8	-81.1	31.7	10.74325	0.832	-88.2	69.2	38.3	33.7	30.0	39.93665	1-2
3	-10.691	-19.984	517.15965	-60.0	9.6	-80.0	31.2	10.36978	0.873	-85.5	68.2	40.7	29.4	26.9	34.72478	2-3
4	-10.588	-18.356	540.80723	-64.6	10.9	-79.9	29.5	10.84096	0.821	-85.0	69.8	36.1	34.9	33.2	48.56550	3-4
5	-12.094	-18.001	556.76793	-56.9	12.0	-82.4	32.3	11.16397	0.789	-91.2	70.2	36.0	38.1	32.9	46.81797	4-5
6	-12.131	-19.703	531.48373	-51.6	10.6	-82.1	34.0	10.65409	0.841	-91.1	68.6	40.6	32.9	26.5	50.42937	5-6
7	-10.691	-19.984	517.15965	-60.0	9.6	-80.0	31.2	10.36978	0.873	-85.5	68.2	40.7	29.4	26.9	44.42426	6-7

JULY 31, 1964 13 HR 22 MIN 27 SEC 424 MS TAB NO 57 ATLAS PHOTO NO 57 POD SEQUENCE NO 739

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				201.375	457.92847	-8.083	-26.065	2193.384	2.379	-67.773	115.702					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-10.784	-20.257	506.13011	-56.4	10.2	-81.5	32.4	10.58352	0.832	-89.2	67.9	41.5	28.6	25.8	0	0-1
2	-11.355	-19.059	526.58563	-58.3	10.7	-81.1	31.7	10.57597	0.833	-88.2	69.1	38.3	33.6	30.0	39.59490	1-2
3	-10.692	-19.989	509.11646	-60.0	9.6	-80.0	31.2	10.20850	0.873	-85.5	68.2	40.7	29.4	26.9	34.17958	2-3
4	-10.591	-18.387	532.37598	-64.6	10.9	-79.9	29.5	10.67195	0.822	-85.0	69.7	36.1	34.9	33.2	47.79957	3-4
5	-12.073	-18.038	548.07218	-56.9	12.0	-82.4	32.3	10.98961	0.789	-91.2	70.2	36.0	38.0	32.9	46.08218	4-5
6	-12.110	-19.713	523.20840	-51.6	10.6	-82.2	33.9	10.48821	0.841	-91.1	68.6	40.6	32.9	26.5	49.62978	5-6
7	-10.692	-19.989	509.11646	-60.0	9.6	-80.0	31.2	10.20850	0.873	-85.5	68.2	40.7	29.4	26.9	43.72990	6-7

JULY 31, 1964 13 HR 22 MIN 32 SEC 464 MS TAB NO 58 ATLAS PHOTO NO 58 POD SEQUENCE NO 745

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				196.335	446.82239	-8.134	-25.957	2182.278	2.384	-67.700	115.685					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-10.778	-20.271	493.91265	-56.4	10.2	-81.5	32.4	10.33185	0.832	-89.2	67.9	41.6	28.5	25.7	0	0-1
2	-11.342	-19.090	514.06083	-58.3	10.7	-81.1	31.7	10.32442	0.833	-88.2	69.1	38.3	33.6	29.9	39.05493	1-2
3	-10.694	-19.997	497.02183	-60.0	9.6	-80.0	31.2	9.96599	0.873	-85.5	68.2	40.7	29.4	26.9	33.35951	2-3
4	-10.595	-18.434	519.69711	-64.5	10.9	-79.9	29.6	10.41780	0.822	-85.0	69.7	36.1	34.8	33.1	46.66748	3-4
5	-12.042	-18.093	534.99601	-56.9	12.0	-82.4	32.3	10.72741	0.790	-91.2	70.1	36.0	37.9	32.8	44.97567	4-5
6	-12.079	-19.728	510.76490	-51.6	10.5	-82.2	33.9	10.23877	0.842	-91.0	68.6	40.6	32.8	26.5	48.42727	5-6
7	-10.694	-19.997	497.02183	-60.0	9.6	-80.0	31.2	9.96599	0.873	-85.5	68.2	40.7	29.4	26.9	42.68588	6-7

JULY 31, 1964 13 HR 22 MIN 37 SEC 504 MS TAB NO 59 ATLAS PHOTO NO 59 POD SEQUENCE NO 751

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				191.296	435.69974	-8.186	-25.847	2171.155	2.388	-67.626	115.667					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-10.771	-20.285	481.67430	-56.4	10.2	-81.5	32.4	10.07953	0.832	-89.2	67.9	41.6	28.4	25.7	0	0-1
2	-11.328	-19.121	501.50421	-58.3	10.7	-81.1	31.7	10.07223	0.833	-88.2	69.1	38.3	33.6	29.9	38.49304	1-2
3	-10.696	-20.006	484.89629	-60.0	9.6	-80.0	31.2	9.72285	0.873	-85.5	68.1	40.7	29.4	26.9	32.53736	2-3
4	-10.600	-18.481	506.98653	-64.5	10.9	-79.9	29.6	10.16301	0.823	-85.0	69.6	36.1	34.8	33.1	45.49280	3-4
5	-12.011	-18.150	521.88799	-56.9	11.9	-82.3	32.2	10.46458	0.791	-91.2	70.1	36.0	37.9	32.7	43.86684	4-5
6	-12.047	-19.743	498.29002	-51.7	10.5	-82.2	33.9	9.98871	0.842	-91.0	68.5	40.6	32.8	26.5	47.22235	5-6
7	-10.696	-20.006	484.89629	-60.0	9.6	-80.0	31.2	9.72285	0.873	-85.5	68.1	40.7	29.4	26.9	41.63942	6-7

JULY 31, 1964 13 HR 22 MIN 42 SEC 544 MS TAB NO 60 ATLAS PHOTO NO 60 POD SEQUENCE NO 757

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				186.256	424.56067	-8.239	-25.737	2160.016	2.393	-67.551	115.650					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
1	-10.765	-20.298	469.41522	-56.4	10.2	-81.5	32.4	9.82663	0.833	-89.2	67.9	41.7	28.4	25.6	0	0-1
2	-11.314	-19.152	488.91855	-58.2	10.7	-81.1	31.8	9.81946	0.834	-88.2	69.0	38.3	33.5	29.9	37.91374	1-2
3	-10.698	-20.015	472.74214	-59.9	9.6	-80.0	31.3	9.47915	0.873	-85.5	68.1	40.7	29.3	26.9	31.71362	2-3
4	-10.604	-18.528	494.24738	-64.5	10.8	-79.9	29.7	9.90765	0.823	-85.0	69.6	36.1	34.7	33.0	44.33617	3-4
5	-11.980	-18.206	508.75154	-56.9	11.9	-82.3	32.2	10.20118	0.791	-91.2	70.0	36.0	37.8	32.7	42.75587	4-5
6	-12.015	-19.759	485.78623	-51.7	10.5	-82.2	33.8	9.73806	0.842	-91.0	68.5	40.6	32.8	26.5	46.01570	5-6
7	-10.698	-20.015	472.74214	-59.9	9.6	-80.0	31.3	9.47915	0.873	-85.5	68.1	40.7	29.3	26.9	40.59061	6-7

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JULY 31, 1964 13 HR 22 MIN 47 SEC 583 MS TAB NO 61 ATLAS PHOTO NO 61 POD SEQUENCE NO 763

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				181.216	413.40463	-8.292	-25.625	2148.860	2.398	-67.475	115.632			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-10.759	-20.311	457.13475	-56.4	10.2	-81.5	32.3	9.57370	0.833	-89.2	67.9	41.7 28.3	25.6	0- 1
2	-11.300	-19.181	476.33249	-58.2	10.7	-81.1	31.8	9.56668	0.834	-88.2	69.0	38.3 33.5	29.8	37.36953 1- 2
3	-10.700	-20.022	460.58317	-59.9	9.6	-80.0	31.3	9.23534	0.873	-85.5	68.1	40.7 29.3	26.9	30.89202 2- 3
4	-10.608	-18.574	481.51175	-64.4	10.8	-79.9	29.7	9.65236	0.823	-85.0	69.5	36.1 34.7	33.0	43.18357 3- 4
5	-11.948	-18.261	495.62114	-56.9	11.9	-82.3	32.2	9.93769	0.792	-91.2	70.0	36.0 37.8	32.6	41.64626 4- 5
6	-11.982	-19.773	473.27905	-51.7	10.5	-82.2	33.8	9.48735	0.843	-91.0	68.5	40.6 32.7	26.5	44.81389 5- 6
7	-10.700	-20.022	460.58317	-59.9	9.6	-80.0	31.3	9.23534	0.873	-85.5	68.1	40.7 29.3	26.9	39.54209 6- 7

JULY 31, 1964 13 HR 22 MIN 54 SEC 303 MS TAB NO 62 ATLAS PHOTO NO 62 POD SEQUENCE NO 771

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				174.497	398.50369	-8.364	-25.474	2133.959	2.405	-67.374	115.608			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
1	-10.751	-20.329	440.72772	-56.4	10.2	-81.5	32.3	9.23572	0.834	-89.2	67.8	41.8 28.2	25.5	0- 1
2	-11.280	-19.221	459.51450	-58.2	10.7	-81.1	31.8	9.22891	0.834	-88.2	69.0	38.3 33.4	29.8	36.63373 1- 2
3	-10.702	-20.031	444.33374	-59.9	9.6	-80.0	31.3	8.90952	0.873	-85.5	68.1	40.7 29.3	26.9	29.79528 2- 3
4	-10.613	-18.635	464.49617	-64.4	10.8	-79.8	29.8	9.31127	0.824	-85.0	69.5	36.1 34.7	32.9	41.64554 3- 4
5	-11.906	-18.333	478.08020	-56.9	11.9	-82.3	32.2	9.58617	0.793	-91.1	69.9	36.0 37.7	32.5	40.16439 4- 5
6	-11.939	-19.791	456.56544	-51.8	10.5	-82.2	33.7	9.15232	0.843	-91.0	68.5	40.6 32.7	26.4	43.21081 5- 6
7	-10.702	-20.031	444.33374	-59.9	9.6	-80.0	31.3	8.90952	0.873	-85.5	68.1	40.7 29.3	26.9	38.14114 6- 7

JULY 31, 1964 13 HR 22 MIN 57 SEC 663 MS TAB NO 63 ATLAS PHOTO NO 63 POD SEQUENCE NO 775

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				171.137	391.04199	-8.400	-25.397	2126.497	2.408	-67.322	115.595			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.271	-19.241	451.08403	-58.3	10.7	-81.1	31.7	9.05959	0.835	-88.2	69.0	38.3 33.4	29.8	0- 1
3	-10.703	-20.036	436.18812	-59.9	9.6	-80.0	31.3	8.74619	0.873	-85.5	68.1	40.7 29.3	26.9	29.24550 2- 3
4	-10.616	-18.666	455.96703	-64.4	10.8	-79.8	29.8	9.14030	0.824	-85.0	69.5	36.1 34.6	32.9	40.87486 3- 4
5	-11.884	-18.370	469.24836	-56.9	11.8	-82.3	32.2	9.40989	0.793	-91.1	69.9	36.0 37.6	32.5	39.42190 4- 5
6	-11.917	-19.801	448.18748	-51.8	10.5	-82.2	33.7	8.98437	0.843	-91.0	68.5	40.6 32.7	26.4	42.40772 5- 6
7	-10.703	-20.036	436.18812	-59.9	9.6	-80.0	31.3	8.74619	0.873	-85.5	68.1	40.7 29.3	26.9	37.43903 6- 7

JULY 31, 1964 13 HR 23 MIN 1 SEC 22 MS TAB NO 64 ATLAS PHOTO NO 64 POD SEQUENCE NO 779

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				167.777	383.57242	-8.436	-25.320	2119.028	2.412	-67.271	115.583			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.261	-19.261	442.64019	-58.3	10.7	-81.1	31.7	8.89001	0.835	-88.2	68.9	38.3 33.4	29.8	0- 1
3	-10.703	-20.041	428.02923	-59.9	9.6	-80.0	31.3	8.58259	0.873	-85.5	68.1	40.7 29.3	26.9	28.69505 2- 3
4	-10.618	-18.697	447.42473	-64.3	10.8	-79.8	29.8	8.96908	0.824	-85.0	69.4	36.1 34.6	32.8	40.10328 3- 4
5	-11.863	-18.407	460.48343	-56.9	11.8	-82.3	32.2	9.23334	0.794	-91.1	69.8	36.0 37.6	32.5	38.67845 4- 5
6	-11.895	-19.810	439.79612	-51.8	10.5	-82.2	33.7	8.81616	0.843	-91.0	68.5	40.6 32.7	26.4	41.60385 5- 6
7	-10.703	-20.041	428.02923	-59.9	9.6	-80.0	31.3	8.58259	0.873	-85.5	68.1	40.7 29.3	26.9	36.73580 6- 7

JULY 31, 1964 13 HR 23 MIN 7 SEC 742 MS TAB NO 65 ATLAS PHOTO NO 65 POD SEQUENCE NO 787

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				161.057	368.61078	-8.510	-25.165	2104.066	2.418	-67.166	115.558			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.241	-19.301	425.71046	-58.3	10.7	-81.1	31.7	8.54999	0.835	-88.2	68.9	38.3 33.4	29.7	0- 1
3	-10.705	-20.052	411.67027	-59.9	9.7	-80.0	31.3	8.25457	0.873	-85.5	68.1	40.7 29.3	26.9	27.59177 2- 3
4	-10.622	-18.759	430.29851	-64.3	10.8	-79.8	29.9	8.62576	0.825	-85.0	69.4	36.1 34.5	32.8	38.55705 3- 4
5	-11.814	-18.481	442.83197	-56.9	11.8	-82.3	32.2	8.87940	0.794	-91.1	69.7	36.0 37.5	32.4	37.18837 4- 5
6	-11.851	-19.830	422.97182	-51.9	10.4	-82.2	33.6	8.47891	0.843	-91.0	68.4	40.6 32.6	26.4	39.99324 5- 6
7	-10.705	-20.052	411.67027	-59.9	9.7	-80.0	31.3	8.25457	0.873	-85.5	68.1	40.7 29.3	26.9	35.32621 6- 7

JULY 31, 1964 13 HR 23 MIN 12 SEC 782 MS TAB NO 66 ATLAS PHOTO NO 66 POD SEQUENCE NO 793

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ			
				156.018	357.36908	-8.566	-25.047	2092.824	2.424	-67.087	115.538			
PHOTO DATA														
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-11.225	-19.333	412.97379	-58.3	10.7	-81.0	31.7	8.29418	0.835	-88.2	68.9	38.3 33.3	29.7	0- 1
3	-10.706	-20.060	399.36265	-59.9	9.7	-80.0	31.3	8.00778	0.873	-85.5	68.1	40.7 29.3	26.9	26.76192 2- 3
4	-10.626	-18.807	417.41463	-64.3	10.8	-79.8	29.9	8.36749	0.825	-85.0	69.3	36.1 34.5	32.7	37.39427 3- 4
5	-11.787	-18.537	429.55411	-56.9	11.8	-82.3	32.2	8.61316	0.795	-91.1	69.7	36.0 37.5	32.4	36.06785 4- 5
6	-11.817	-19.845	410.31472	-51.9	10.4	-82.2	33.6	8.22519	0.844	-91.0	68.4	40.6 32.6	26.4	38.78238 5- 6
7	-10.706	-20.060	399.36265	-59.9	9.7	-80.0	31.3	8.00778	0.873	-85.5	68.1	40.7 29.3	26.9	34.26584 6- 7

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JULY 31, 1964 13 HR 23 MIN 16 SEC 142 MS TAB NO 67 ATLAS PHOTO NO 67 POD SEQUENCE NO 797

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				152.658	349.86511	-8.603	-24.967	2085.320	2.427	-67.034	115.525
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.215	-19.354	404.46634	-58.3	10.7	-81.0	31.7	8.12332	0.836	-88.2	68.8 38.3 33.3 29.7 0. 1- 2
3	-10.706	-20.066	391.14108	-59.9	9.7	-80.0	31.3	7.84293	0.873	-85.5	68.1 40.7 29.3 26.9 26.20798 2- 3
4	-10.628	-18.839	408.80823	-64.2	10.8	-79.8	29.9	8.19497	0.826	-85.0	69.3 36.1 34.5 32.7 36.61758 3- 4
5	-11.765	-18.575	420.68662	-56.9	11.7	-82.3	32.2	8.43535	0.796	-91.1	69.7 36.0 37.4 32.3 35.32009 4- 5
6	-11.795	-19.856	401.86139	-52.0	10.4	-82.2	33.6	8.05574	0.844	-91.0	68.4 40.6 32.6 26.4 37.97392 5- 6
7	-10.706	-20.066	391.14108	-59.9	9.7	-80.0	31.3	7.84293	0.873	-85.5	68.1 40.7 29.3 26.9 33.55821 6- 7

JULY 31, 1964 13 HR 23 MIN 21 SEC 181 MS TAB NO 68 ATLAS PHOTO NO 68 POD SEQUENCE NO 803

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				147.618	338.59421	-8.660	-24.847	2074.049	2.432	-66.953	115.505
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.200	-19.385	391.67744	-58.2	10.6	-81.0	31.8	7.86647	0.836	-88.2	68.8 38.3 33.3 29.6 0. 1- 2
3	-10.707	-20.075	378.78140	-59.9	9.7	-80.0	31.3	7.59510	0.873	-85.5	68.1 40.7 29.3 26.8 25.37549 2- 3
4	-10.631	-18.887	395.87057	-64.2	10.8	-79.8	30.0	7.93563	0.826	-85.0	69.2 36.1 34.4 32.7 35.45029 3- 4
5	-11.732	-18.632	407.35817	-56.9	11.7	-82.3	32.2	8.16810	0.796	-91.1	69.6 36.0 37.4 32.3 34.19675 4- 5
6	-11.761	-19.872	389.15458	-52.0	10.4	-82.2	33.5	7.80102	0.844	-91.0	68.4 40.6 32.6 26.4 36.75918 5- 6
7	-10.707	-20.075	378.78140	-59.9	9.7	-80.0	31.3	7.59510	0.873	-85.5	68.1 40.7 29.3 26.8 32.49476 6- 7

JULY 31, 1964 13 HR 23 MIN 22 SEC 861 MS TAB NO 69 ATLAS PHOTO NO 69 POD SEQUENCE NO 805

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				145.938	334.83350	-8.679	-24.807	2070.289	2.434	-66.926	115.499
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.195	-19.396	387.40699	-58.2	10.6	-81.0	31.8	7.78070	0.836	-88.2	68.8 38.3 33.3 29.6 0. 1- 2
3	-10.708	-20.079	374.65422	-59.9	9.7	-80.0	31.3	7.51235	0.873	-85.5	68.1 40.7 29.3 26.8 25.09746 2- 3
4	-10.632	-18.903	391.55062	-64.2	10.8	-79.8	30.0	7.84903	0.826	-85.0	69.2 36.1 34.4 32.7 35.06062 3- 4
5	-11.721	-18.652	402.90791	-56.9	11.7	-82.3	32.2	8.07887	0.796	-91.1	69.6 36.0 37.3 32.2 33.82176 4- 5
6	-11.750	-19.877	384.91154	-52.0	10.4	-82.2	33.5	7.71596	0.844	-91.0	68.4 40.6 32.6 26.4 36.35372 5- 6
7	-10.708	-20.079	374.65422	-59.9	9.7	-80.0	31.3	7.51235	0.873	-85.5	68.1 40.7 29.3 26.8 32.13962 6- 7

JULY 31, 1964 13 HR 23 MIN 24 SEC 541 MS TAB NO 70 ATLAS PHOTO NO 70 POD SEQUENCE NO 807

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				144.258	331.07043	-8.698	-24.766	2066.526	2.436	-66.899	115.492
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.190	-19.407	383.13224	-58.2	10.6	-81.0	31.8	7.69485	0.836	-88.2	68.8 38.3 33.3 29.6 0. 1- 2
3	-10.708	-20.082	370.52285	-59.9	9.7	-79.9	31.3	7.42951	0.873	-85.5	68.1 40.7 29.3 26.8 24.81933 2- 3
4	-10.634	-18.920	387.22637	-64.2	10.8	-79.8	30.0	7.76235	0.826	-85.0	69.2 36.1 34.4 32.6 34.67061 3- 4
5	-11.710	-18.671	398.45330	-56.9	11.7	-82.3	32.2	7.98955	0.797	-91.1	69.6 36.0 37.3 32.2 33.44637 4- 5
6	-11.739	-19.883	380.66423	-52.0	10.4	-82.2	33.5	7.63082	0.844	-91.0	68.4 40.6 32.5 26.4 35.94797 5- 6
7	-10.708	-20.082	370.52285	-59.9	9.7	-79.9	31.3	7.42951	0.873	-85.5	68.1 40.7 29.3 26.8 31.78425 6- 7

JULY 31, 1964 13 HR 23 MIN 26 SEC 221 MS TAB NO 71 ATLAS PHOTO NO 71 POD SEQUENCE NO 809

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				142.578	327.30569	-8.718	-24.725	2062.761	2.438	-66.872	115.485
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.185	-19.418	378.85394	-58.2	10.6	-81.0	31.8	7.60892	0.836	-88.2	68.8 38.3 33.3 29.6 0. 1- 2
3	-10.708	-20.085	366.38800	-59.8	9.7	-79.9	31.4	7.34660	0.873	-85.5	68.1 40.7 29.3 26.8 24.54079 2- 3
4	-10.635	-18.936	382.89863	-64.2	10.8	-79.7	30.0	7.67560	0.826	-85.0	69.2 36.1 34.4 32.6 34.28032 3- 4
5	-11.694	-18.690	393.99516	-56.9	11.7	-82.3	32.2	7.90015	0.797	-91.1	69.5 36.0 37.3 32.2 33.07066 4- 5
6	-11.728	-19.888	376.41341	-52.0	10.4	-82.2	33.5	7.54561	0.844	-91.0	68.4 40.6 32.5 26.4 35.54194 5- 6
7	-10.708	-20.085	366.38800	-59.8	9.7	-79.9	31.4	7.34660	0.873	-85.5	68.1 40.7 29.3 26.8 31.42848 6- 7

JULY 31, 1964 13 HR 23 MIN 27 SEC 901 MS TAB NO 72 ATLAS PHOTO NO 72 POD SEQUENCE NO 811

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ
				140.899	323.53867	-8.737	-24.684	2058.994	2.439	-66.844	115.478
PHOTO DATA											
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.180	-19.429	374.57140	-58.2	10.6	-81.0	31.8	7.52291	0.836	-88.2	68.8 38.3 33.2 29.6 0. 1- 2
3	-10.709	-20.089	362.24902	-59.8	9.7	-79.9	31.4	7.26360	0.873	-85.5	68.1 40.7 29.3 26.8 24.26216 2- 3
4	-10.636	-18.952	378.56667	-64.2	10.8	-79.7	30.0	7.58876	0.827	-85.0	69.2 36.1 34.4 32.6 33.88972 3- 4
5	-11.688	-18.709	389.53278	-56.9	11.7	-82.2	32.2	7.81068	0.797	-91.1	69.5 36.0 37.3 32.2 32.69476 4- 5
6	-11.716	-19.894	372.15837	-52.0	10.4	-82.2	33.5	7.46032	0.845	-91.0	68.4 40.6 32.5 26.4 35.13559 5- 6
7	-10.709	-20.089	362.24902	-59.8	9.7	-79.9	31.4	7.26360	0.873	-85.5	68.1 40.7 29.3 26.8 31.07248 6- 7

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TAB NO 73															ATLAS PHOTO NO 73					POD SEQUENCE NO 813																								
JULY 31,1964 13 HR 23 MIN 29 SEC 581 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					139.219					319.76990					-8.756					-24.643					2055.225					2.441					-66.817					115.472				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
2	-11.175	-19.440	370.28423	-58.2	10.6	-81.0	31.8	7.43681	0.836	-88.2	68.8	38.3	33.2	29.6	0.	1-2																												
3	-10.709	-20.092	358.10572	-59.8	9.7	-79.9	31.4	7.18053	0.873	-85.5	68.1	40.7	29.3	26.8	23.98306	2-3																												
4	-10.637	-18.969	374.23021	-64.1	10.8	-79.7	30.1	7.50183	0.827	-85.0	69.2	36.1	34.4	32.6	33.49874	3-4																												
5	-11.677	-18.729	385.06558	-56.9	11.7	-82.2	32.2	7.72110	0.797	-91.1	69.5	36.0	37.3	32.2	32.318274	4-5																												
6	-11.705	-19.899	367.88870	-52.0	10.4	-82.2	33.5	7.37493	0.845	-91.0	68.4	40.6	32.5	26.4	34.72885	5-6																												
7	-10.709	-20.092	358.10572	-59.8	9.7	-79.9	31.4	7.18053	0.873	-85.5	68.1	40.7	29.3	26.8	30.71594	6-7																												
JULY 31,1964 13 HR 23 MIN 31 SEC 261 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					137.539					315.99921					-8.776					-24.602					2051.454					2.443					-66.789					115.465				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
2	-11.169	-19.451	365.99216	-58.2	10.6	-81.0	31.8	7.35060	0.837	-88.1	68.7	38.3	33.2	29.6	0.	1-2																												
3	-10.709	-20.096	353.95781	-59.8	9.7	-79.9	31.4	7.09735	0.873	-85.5	68.1	40.7	29.3	26.8	23.70366	2-3																												
4	-10.638	-18.986	369.88891	-64.1	10.8	-79.7	30.1	7.41481	0.827	-85.0	69.1	36.1	34.4	32.6	33.10730	3-4																												
5	-11.666	-18.749	380.59322	-56.9	11.7	-82.2	32.2	7.63143	0.798	-91.1	69.5	36.0	37.2	32.1	31.94137	4-5																												
6	-11.694	-19.905	363.63407	-52.1	10.4	-82.2	33.4	7.28944	0.845	-91.0	68.3	40.6	32.5	26.4	34.32166	5-6																												
7	-10.709	-20.096	353.95781	-59.8	9.7	-79.9	31.4	7.09735	0.873	-85.5	68.1	40.7	29.3	26.8	30.35902	6-7																												
JULY 31,1964 13 HR 23 MIN 32 SEC 941 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					135.859					312.22643					-8.795					-24.561					2047.682					2.445					-66.762					115.458				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
2	-11.164	-19.462	361.69611	-58.2	10.6	-81.0	31.8	7.26432	0.837	-88.1	68.7	38.3	33.2	29.6	0.	1-2																												
3	-10.709	-20.099	349.80598	-59.8	9.7	-79.9	31.4	7.01410	0.873	-85.5	68.1	40.7	29.3	26.8	23.42398	2-3																												
4	-10.639	-19.002	365.54366	-64.1	10.8	-79.7	30.1	7.32771	0.827	-85.0	69.1	36.1	34.3	32.6	32.71555	3-4																												
5	-11.655	-18.768	376.11687	-57.0	11.7	-82.2	32.2	7.54167	0.798	-91.1	69.5	36.0	37.2	32.1	31.56404	4-5																												
6	-11.682	-19.911	359.36548	-52.1	10.4	-82.2	33.4	7.20387	0.845	-91.0	68.3	40.6	32.5	26.4	33.91418	5-6																												
7	-10.709	-20.099	349.80598	-59.8	9.7	-79.9	31.4	7.01410	0.873	-85.5	68.1	40.7	29.3	26.8	30.00170	6-7																												
JULY 31,1964 13 HR 23 MIN 34 SEC 620 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					134.179					308.45154					-8.815					-24.519					2043.907					2.447					-66.734					115.451				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
2	-11.159	-19.474	357.39598	-58.2	10.6	-81.0	31.8	7.17796	0.837	-88.1	68.7	38.3	33.2	29.6	0.	1-2																												
3	-10.709	-20.103	345.65020	-59.8	9.7	-79.9	31.4	6.93077	0.874	-85.5	68.1	40.7	29.3	26.8	23.14402	2-3																												
4	-10.639	-19.019	361.19441	-64.1	10.8	-79.7	30.1	7.24052	0.827	-85.0	69.1	36.1	34.3	32.5	32.32353	3-4																												
5	-11.644	-18.788	371.63652	-57.0	11.7	-82.2	32.2	7.45183	0.798	-91.1	69.4	36.0	37.2	32.1	31.18650	4-5																												
6	-11.671	-19.917	355.09290	-52.1	10.4	-82.2	33.4	7.11823	0.845	-91.0	68.3	40.6	32.5	26.4	33.50462	5-6																												
7	-10.709	-20.103	345.65020	-59.8	9.7	-79.9	31.4	6.93077	0.874	-85.5	68.1	40.7	29.3	26.8	29.64416	6-7																												
JULY 31,1964 13 HR 23 MIN 36 SEC 300 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					132.499					304.67471					-8.834					-24.478					2040.130					2.448					-66.706					115.444				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
2	-11.153	-19.485	353.09203	-58.2	10.6	-81.0	31.8	7.09152	0.837	-88.1	68.7	38.3	33.2	29.6	0.	1-2																												
3	-10.709	-20.107	341.49065	-59.8	9.7	-79.9	31.4	6.84737	0.874	-85.5	68.1	40.7	29.3	26.8	22.86386	2-3																												
4	-10.640	-19.036	356.84134	-64.1	10.8	-79.7	30.1	7.15326	0.827	-85.0	69.1	36.1	34.3	32.5	31.93121	3-4																												
5	-11.632	-18.808	367.15234	-57.0	11.7	-82.2	32.2	7.36192	0.798	-91.1	69.4	36.0	37.2	32.1	30.80877	4-5																												
6	-11.659	-19.923	350.81649	-52.1	10.4	-82.2	33.4	7.03250	0.845	-91.0	68.3	40.6	32.5	26.4	33.09837	5-6																												
7	-10.709	-20.107	341.49065	-59.8	9.7	-79.9	31.4	6.84737	0.874	-85.5	68.1	40.7	29.3	26.8	29.28631	6-7																												
JULY 31,1964 13 HR 23 MIN 37 SEC 980 MS																																												
TRAJECTORY DATA					SEC TO IMPACT					ALT					LAT					LCN					R					V					PTH					AZ				
					130.819					300.89594					-8.854					-24.436					2036.351					2.450					-66.679					115.437				
PHOTO DATA																																												
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT																												
2	-11.148	-19.496	348.78427	-58.2	10.6	-81.0	31.8	7.00500	0.837	-88.1	68.7	38.3	33.2	29.5	0.	1-2																												
3	-10.709	-20.110	337.32738	-59.8	9.7	-79.9	31.4	6.76389	0.874	-85.5	68.1	40.7	29.3	26.8	22.58355	2-3																												
4	-10.641	-19.053	352.48448	-64.1	10.8	-79.7	30.1	7.06593	0.827	-85.0	69.1	36.1	34.3	32.5	31.53860	3-4																												
5	-11.621	-18.827	362.66439	-57.0	11.6	-82.2	32.2	7.27193	0.798	-91.1	69.4	36.0	37.1	32.1	30.43063	4-5																												
6	-11.647	-19.929	346.53629	-52.1	10.4	-82.2	33.4	6.94670	0.845	-91.0	68.3	40.6	32.5	26.3	32.69007	5-6																												
7	-10.709	-20.110	337.32738	-59.8	9.7	-79.9	31.4	6.76389	0.874	-85.5	68.1	40.7	29.3	26.8	28.92805	6-7																												

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JULY 31, 1964 13 HR 23 MIN 39 SEC 660 MS TAB NO 79 ATLAS PHOTO NO 79 POD SEQUENCE NO 825

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										129.139	297.11494	-8.874	-24.394	2032.570	2.452	-66.651	115.430
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.142	-19.508	344.47228	-58.2	10.6	-81.0	31.8	6.91840	0.837	-88.1	68.7	38.3	33.2	29.5	0.	1- 2	
3	-10.709	-20.114	333.15998	-59.8	9.7	-79.9	31.4	6.68033	0.874	-85.5	68.1	40.7	29.3	26.8	22.30289	2- 3	
4	-10.642	-19.070	348.12346	-64.1	10.8	-79.7	30.1	6.97851	0.828	-85.0	69.1	36.1	34.3	32.5	31.14566	3- 4	
5	-11.610	-18.847	358.17222	-57.0	11.6	-82.2	32.2	7.18186	0.799	-91.1	69.4	36.0	37.1	32.1	30.05220	4- 5	
6	-11.636	-19.935	342.25192	-52.1	10.3	-82.2	33.4	6.86082	0.845	-91.0	68.3	40.6	32.4	26.3	32.28147	5- 6	
7	-10.709	-20.114	333.15998	-59.8	9.7	-79.9	31.4	6.68033	0.874	-85.5	68.1	40.7	29.3	26.8	28.56957	6- 7	

JULY 31, 1964 13 HR 23 MIN 41 SEC 340 MS TAB NO 80 ATLAS PHOTO NO 80 POD SEQUENCE NO 827

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										127.459	293.33220	-8.893	-24.352	2028.787	2.454	-66.622	115.423
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.137	-19.519	340.15668	-58.2	10.6	-81.0	31.8	6.83172	0.837	-88.1	68.7	38.3	33.2	29.5	0.	1- 2	
3	-10.709	-20.118	328.98903	-59.8	9.7	-79.9	31.4	6.59670	0.874	-85.5	68.0	40.7	29.3	26.8	22.02209	2- 3	
4	-10.643	-19.087	343.75882	-64.1	10.8	-79.7	30.2	6.89101	0.828	-85.0	69.1	36.1	34.3	32.5	30.75246	3- 4	
5	-11.598	-18.867	353.67647	-57.0	11.6	-82.2	32.1	7.09171	0.799	-91.1	69.4	36.0	37.1	32.0	29.67356	4- 5	
6	-11.624	-19.941	337.96397	-52.1	10.3	-82.2	33.4	6.77486	0.845	-91.0	68.3	40.6	32.4	26.3	31.87263	5- 6	
7	-10.709	-20.118	328.98903	-59.8	9.7	-79.9	31.4	6.59670	0.874	-85.5	68.0	40.7	29.3	26.8	28.21077	6- 7	

JULY 31, 1964 13 HR 23 MIN 43 SEC 20 MS TAB NO 81 ATLAS PHOTO NO 81 POD SEQUENCE NO 829

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										125.779	289.54726	-8.913	-24.309	2025.003	2.456	-66.594	115.416
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.131	-19.531	335.83691	-58.2	10.6	-81.0	31.8	6.74496	0.837	-88.1	68.7	38.3	33.1	29.5	0.	1- 2	
3	-10.709	-20.122	324.81400	-59.8	9.7	-79.9	31.4	6.51298	0.874	-85.5	68.0	40.7	29.3	26.8	21.74103	2- 3	
4	-10.643	-19.104	339.39007	-64.0	10.8	-79.7	30.2	6.80344	0.828	-85.0	69.0	36.1	34.3	32.5	30.35895	3- 4	
5	-11.587	-18.887	349.17659	-57.0	11.6	-82.2	32.1	7.00148	0.799	-91.1	69.3	36.0	37.1	32.0	29.29442	4- 5	
6	-11.613	-19.947	333.67188	-52.1	10.3	-82.2	33.4	6.68883	0.845	-91.0	68.3	40.6	32.4	26.3	31.46349	5- 6	
7	-10.709	-20.122	324.81400	-59.8	9.7	-79.9	31.4	6.51298	0.874	-85.5	68.0	40.7	29.3	26.8	27.85157	6- 7	

JULY 31, 1964 13 HR 23 MIN 44 SEC 700 MS TAB NO 82 ATLAS PHOTO NO 82 POD SEQUENCE NO 831

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										124.100	285.76062	-8.933	-24.267	2021.216	2.458	-66.566	115.408
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.126	-19.543	331.51262	-58.2	10.6	-81.0	31.8	6.65811	0.837	-88.1	68.7	38.3	33.1	29.5	0.	1- 2	
3	-10.709	-20.126	320.63464	-59.8	9.7	-79.9	31.4	6.42918	0.874	-85.5	68.0	40.7	29.3	26.8	21.45955	2- 3	
4	-10.644	-19.121	335.01659	-64.0	10.8	-79.7	30.2	6.71577	0.828	-85.0	69.0	36.1	34.2	32.4	29.96495	3- 4	
5	-11.576	-18.908	344.67207	-57.0	11.6	-82.2	32.1	6.91116	0.799	-91.1	69.3	36.0	37.1	32.0	28.91521	4- 5	
6	-11.601	-19.954	329.37553	-52.1	10.3	-82.2	33.3	6.60270	0.845	-91.0	68.3	40.6	32.4	26.3	31.05384	5- 6	
7	-10.709	-20.126	320.63464	-59.8	9.7	-79.9	31.4	6.42918	0.874	-85.5	68.0	40.7	29.3	26.8	27.49208	6- 7	

JULY 31, 1964 13 HR 23 MIN 46 SEC 380 MS TAB NO 83 ATLAS PHOTO NO 83 POD SEQUENCE NO 833

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										122.420	281.97141	-8.953	-24.224	2017.427	2.459	-66.538	115.401
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.120	-19.554	327.18299	-58.2	10.6	-81.0	31.8	6.57116	0.838	-88.1	68.6	38.3	33.1	29.5	0.	1- 2	
3	-10.709	-20.130	316.45013	-59.8	9.7	-79.9	31.4	6.34527	0.874	-85.5	68.0	40.7	29.3	26.8	21.17786	2- 3	
4	-10.645	-19.139	330.63762	-64.0	10.8	-79.7	30.2	6.62799	0.828	-85.0	69.0	36.1	34.2	32.4	29.57038	3- 4	
5	-11.564	-18.928	340.16215	-57.0	11.6	-82.2	32.1	6.82073	0.800	-91.1	69.3	36.0	37.0	32.0	28.53553	4- 5	
6	-11.589	-19.960	325.07408	-52.1	10.3	-82.2	33.3	6.51648	0.846	-91.0	68.3	40.6	32.4	26.3	30.64370	5- 6	
7	-10.709	-20.130	316.45013	-59.8	9.7	-79.9	31.4	6.34527	0.874	-85.5	68.0	40.7	29.3	26.8	27.13230	6- 7	

JULY 31, 1964 13 HR 23 MIN 48 SEC 60 MS TAB NO 84 ATLAS PHOTO NO 84 POD SEQUENCE NO 835

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										120.740	278.18024	-8.973	-24.181	2013.636	2.461	-66.509	115.394
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-11.115	-19.566	322.84946	-58.2	10.6	-81.0	31.8	6.48412	0.838	-88.1	68.6	38.3	33.1	29.5	0.	1- 2	
3	-10.709	-20.134	312.26179	-59.8	9.7	-79.9	31.4	6.26129	0.874	-85.5	68.0	40.7	29.3	26.8	20.89589	2- 3	
4	-10.646	-19.156	326.25477	-64.0	10.8	-79.7	30.2	6.54013	0.828	-85.0	69.0	36.1	34.2	32.4	29.17555	3- 4	
5	-11.553	-18.948	335.64835	-57.0	11.6	-82.2	32.1	6.73022	0.800	-91.1	69.3	36.0	37.0	32.0	28.15555	4- 5	
6	-11.577	-19.967	320.76875	-52.2	10.3	-82.2	33.3	6.43017	0.846	-91.0	68.3	40.6	32.4	26.3	30.23332	5- 6	
7	-10.709	-20.134	312.26179	-59.8	9.7	-79.9	31.4	6.26129	0.874	-85.5	68.0	40.7	29.3	26.8	26.77220	6- 7	

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JULY 31, 1964 13 HR 23 MIN 49 SEC 740 MS TAB NO 85 ATLAS PHOTO NO 85 POD SEQUENCE NO 837

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				119.060		274.38719	-8.993	-24.138	2009.842	2.463	-66.481	115.387				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.109	-19.578	318.51220	-58.2	10.6	-81.0	31.8	6.39701	0.838	-88.1	68.6	38.3	33.1	29.5	0.	1-2
3	-10.709	-20.138	308.06974	-59.8	9.7	-79.9	31.4	6.17723	0.874	-85.5	68.0	40.7	29.3	26.8	20.61375	2-3
4	-10.647	-19.174	321.86822	-64.0	10.8	-79.7	30.2	6.45220	0.828	-85.0	69.0	36.1	34.2	32.4	28.78044	3-4
5	-11.541	-18.969	331.13085	-57.0	11.6	-82.2	32.1	6.63964	0.800	-91.1	69.3	36.0	37.0	31.9	27.77517	4-5
6	-11.566	-19.973	316.45969	-52.2	10.3	-82.2	33.3	6.34379	0.846	-91.0	68.3	40.6	32.4	26.3	29.82265	5-6
7	-10.709	-20.138	308.06974	-59.8	9.7	-79.9	31.4	6.17723	0.874	-85.5	68.0	40.7	29.3	26.8	26.41179	6-7

JULY 31, 1964 13 HR 23 MIN 51 SEC 419 MS TAB NO 86 ATLAS PHOTO NO 86 POD SEQUENCE NO 839

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				117.380		270.59213	-9.014	-24.095	2006.047	2.465	-66.452	115.379				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.104	-19.590	314.17094	-58.2	10.6	-81.0	31.8	6.30982	0.838	-88.1	68.6	38.3	33.1	29.4	0.	1-2
3	-10.709	-20.143	303.87383	-59.8	9.7	-79.9	31.4	6.09310	0.874	-85.5	68.0	40.7	29.3	26.8	20.33131	2-3
4	-10.647	-19.191	317.47771	-64.0	10.8	-79.7	30.3	6.36419	0.829	-85.0	69.0	36.1	34.2	32.4	28.38506	3-4
5	-11.530	-18.989	326.60943	-57.0	11.6	-82.2	32.1	6.54898	0.800	-91.1	69.2	36.0	37.0	31.9	27.99459	4-5
6	-11.554	-19.980	312.14668	-52.2	10.3	-82.2	33.3	6.25734	0.846	-91.0	68.3	40.6	32.4	26.3	29.41175	5-6
7	-10.709	-20.143	303.87383	-59.8	9.7	-79.9	31.4	6.09310	0.874	-85.5	68.0	40.7	29.3	26.8	26.05097	6-7

JULY 31, 1964 13 HR 23 MIN 53 SEC 99 MS TAB NO 87 ATLAS PHOTO NO 87 POD SEQUENCE NO 841

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				115.700		266.79500	-9.034	-24.052	2002.250	2.467	-66.423	115.372				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.098	-19.602	309.82566	-58.2	10.6	-81.0	31.8	6.22255	0.838	-88.1	68.6	38.3	33.1	29.4	0.	1-2
3	-10.709	-20.147	299.67394	-59.8	9.7	-79.9	31.4	6.00889	0.874	-85.5	68.0	40.7	29.3	26.8	20.04867	2-3
4	-10.648	-19.209	313.08332	-64.0	10.8	-79.7	30.3	6.27610	0.829	-85.0	68.9	36.1	34.2	32.4	27.98936	3-4
5	-11.518	-19.010	322.08400	-57.0	11.6	-82.2	32.1	6.45824	0.801	-91.1	69.2	36.0	36.9	31.9	27.01370	4-5
6	-11.542	-19.986	307.82968	-52.2	10.3	-82.2	33.3	6.17060	0.846	-91.0	68.3	40.6	32.4	26.3	29.00055	5-6
7	-10.709	-20.147	299.67394	-59.8	9.7	-79.9	31.4	6.00889	0.874	-85.5	68.0	40.7	29.3	26.8	25.69003	6-7

JULY 31, 1964 13 HR 23 MIN 54 SEC 779 MS TAB NO 88 ATLAS PHOTO NO 88 POD SEQUENCE NO 843

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				114.020		262.99565	-9.054	-24.009	1998.451	2.469	-66.394	115.365				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.092	-19.614	305.47620	-58.2	10.6	-81.0	31.8	6.13520	0.838	-88.1	68.6	38.3	33.1	29.4	0.	1-2
3	-10.708	-20.152	295.46994	-59.8	9.7	-79.9	31.4	5.92459	0.874	-85.5	68.0	40.7	29.3	26.8	19.76587	2-3
4	-10.649	-19.226	308.68474	-63.9	10.8	-79.6	30.3	6.18793	0.829	-85.0	68.9	36.1	34.1	32.3	27.59338	3-4
5	-11.506	-19.030	317.55442	-57.0	11.6	-82.2	32.1	6.36741	0.801	-91.1	69.2	36.0	36.9	31.9	26.63241	4-5
6	-11.530	-19.993	303.50850	-52.2	10.3	-82.2	33.3	6.08418	0.846	-91.0	68.3	40.6	32.4	26.3	28.58908	5-6
7	-10.708	-20.152	295.46994	-59.8	9.7	-79.9	31.4	5.92459	0.874	-85.5	68.0	40.7	29.3	26.8	25.32867	6-7

JULY 31, 1964 13 HR 23 MIN 56 SEC 459 MS TAB NO 89 ATLAS PHOTO NO 89 POD SEQUENCE NO 845

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				112.340		259.19431	-9.075	-23.965	1994.650	2.471	-66.365	115.357				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.087	-19.626	301.12277	-58.2	10.6	-81.0	31.8	6.04776	0.838	-88.1	68.6	38.3	33.0	29.4	0.	1-2
3	-10.708	-20.156	291.26204	-59.7	9.7	-79.9	31.4	5.64022	0.874	-85.5	68.0	40.7	29.3	26.8	19.48274	2-3
4	-10.649	-19.244	304.28225	-63.9	10.8	-79.6	30.3	6.09968	0.829	-85.0	68.9	36.1	34.1	32.3	27.19713	3-4
5	-11.495	-19.051	313.02093	-57.0	11.6	-82.2	32.1	6.27651	0.801	-91.1	69.2	36.0	36.9	31.8	26.25102	4-5
6	-11.518	-20.000	299.18337	-52.2	10.3	-82.2	33.3	5.99748	0.846	-91.0	68.2	40.6	32.3	26.3	28.17737	5-6
7	-10.708	-20.156	291.26204	-59.7	9.7	-79.9	31.4	5.64022	0.874	-85.5	68.0	40.7	29.3	26.8	24.96691	6-7

JULY 31, 1964 13 HR 23 MIN 58 SEC 139 MS TAB NO 90 ATLAS PHOTO NO 90 POD SEQUENCE NO 847

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				110.660		255.39078	-9.095	-23.921	1990.846	2.473	-66.336	115.350				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.081	-19.639	296.76519	-58.2	10.6	-81.0	31.8	5.96025	0.838	-88.1	68.6	38.3	33.0	29.4	0.	1-2
3	-10.708	-20.160	287.05008	-59.7	9.7	-79.9	31.5	5.75576	0.874	-85.5	68.0	40.7	29.3	26.8	19.19934	2-3
4	-10.650	-19.262	299.87564	-63.9	10.8	-79.6	30.3	6.01134	0.829	-85.0	68.9	36.1	34.1	32.3	26.80056	3-4
5	-11.483	-19.072	308.48333	-57.0	11.6	-82.2	32.1	6.18552	0.801	-91.1	69.1	36.0	36.9	31.8	25.86913	4-5
6	-11.506	-20.007	294.85413	-52.2	10.3	-82.2	33.3	5.91069	0.846	-91.0	68.2	40.6	32.3	26.3	27.76535	5-6
7	-10.708	-20.160	287.05008	-59.7	9.7	-79.9	31.5	5.75576	0.874	-85.5	68.0	40.7	29.3	26.8	24.60492	6-7

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JULY 31, 1964 13 HR 23 MIN 59 SEC 819 MS TAB NO 91 ATLAS PHOTO NO 91 POD SEQUENCE NO 849

TRAJECTORY DATA SEC TO IMPACT 108.980 ALT 251.58553 LAT -9.116 LON -23.877 R 1987.041 V 2.474 PTH -66.307 AZ 115.342

PHOTO DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.075	-19.651	292.40303	-58.2	10.6	-81.0	31.8	5.87264	0.839	-88.1	68.5	38.3	33.0	29.4	0.	1-2
3	-10.708	-20.165	282.83372	-59.7	9.7	-79.9	31.5	5.67122	0.874	-85.4	68.0	40.7	29.2	26.8	18.91568	2-3
4	-10.650	-19.280	295.46441	-63.9	10.8	-79.6	30.3	5.92292	0.829	-85.0	68.9	36.1	34.1	32.3	26.40356	3-4
5	-11.471	-19.092	303.94106	-57.0	11.5	-82.2	32.1	6.09445	0.801	-91.1	69.1	36.0	36.9	31.8	25.48700	4-5
6	-11.494	-20.014	290.52043	-52.2	10.3	-82.2	33.2	5.82382	0.846	-91.0	68.2	40.6	32.3	26.3	27.35292	5-6
7	-10.708	-20.165	282.83372	-59.7	9.7	-79.9	31.5	5.67122	0.874	-85.4	68.0	40.7	29.2	26.8	24.24251	6-7

JULY 31, 1964 13 HR 24 MIN 1 SEC 499 MS TAB NO 92 ATLAS PHOTO NO 92 POD SEQUENCE NO 851

TRAJECTORY DATA SEC TO IMPACT 107.301 ALT 247.77789 LAT -9.136 LON -23.833 R 1983.233 V 2.476 PTH -66.278 AZ 115.334

PHOTO DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.070	-19.663	288.03596	-58.2	10.6	-81.0	31.8	5.78493	0.839	-88.1	68.5	38.3	33.0	29.4	0.	1-2
3	-10.708	-20.170	278.61262	-59.7	9.7	-79.9	31.5	5.58658	0.874	-85.4	68.0	40.7	29.2	26.8	18.63173	2-3
4	-10.651	-19.298	291.04820	-63.9	10.8	-79.6	30.4	5.83432	0.830	-85.0	68.8	36.1	34.1	32.3	26.00612	3-4
5	-11.460	-19.113	299.39381	-57.0	11.5	-82.2	32.1	6.00327	0.802	-91.1	69.1	36.0	36.8	31.8	25.10436	4-5
6	-11.482	-20.021	286.18192	-52.2	10.3	-82.2	33.2	5.73685	0.846	-91.0	68.2	40.6	32.3	26.3	26.94008	5-6
7	-10.708	-20.170	278.61262	-59.7	9.7	-79.9	31.5	5.58658	0.874	-85.4	68.0	40.7	29.2	26.8	23.87975	6-7

JULY 31, 1964 13 HR 24 MIN 3 SEC 179 MS TAB NO 93 ATLAS PHOTO NO 93 POD SEQUENCE NO 853

TRAJECTORY DATA SEC TO IMPACT 105.621 ALT 243.96820 LAT -9.157 LON -23.789 R 1979.423 V 2.478 PTH -66.249 AZ 115.327

PHOTO DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.064	-19.676	282.68489	-58.2	10.6	-81.0	31.8	5.69714	0.839	-88.1	68.5	38.3	33.0	29.4	0.	1-2
3	-10.707	-20.175	274.38756	-59.7	9.7	-79.9	31.5	5.50186	0.874	-85.4	68.0	40.7	29.2	26.8	18.34755	2-3
4	-10.652	-19.316	286.62807	-63.9	10.8	-79.6	30.4	5.74578	0.830	-85.0	68.8	36.1	34.1	32.2	25.60841	3-4
5	-11.448	-19.134	294.84261	-57.0	11.5	-82.2	32.1	5.91201	0.802	-91.1	69.1	36.0	36.8	31.8	24.72151	4-5
6	-11.470	-20.028	281.83940	-52.2	10.3	-82.2	33.2	5.64980	0.847	-91.0	68.2	40.6	32.3	26.3	26.52697	5-6
7	-10.707	-20.175	274.38756	-59.7	9.7	-79.9	31.5	5.50186	0.874	-85.4	68.0	40.7	29.2	26.8	23.51668	6-7

JULY 31, 1964 13 HR 24 MIN 4 SEC 859 MS TAB NO 94 ATLAS PHOTO NO 94 POD SEQUENCE NO 855

TRAJECTORY DATA SEC TO IMPACT 103.941 ALT 240.15630 LAT -9.178 LON -23.744 R 1975.612 V 2.480 PTH -66.219 AZ 115.319

PHOTO DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.058	-19.689	279.28959	-58.2	10.6	-81.0	31.8	5.60926	0.839	-88.1	68.5	38.3	33.0	29.3	0.	1-2
3	-10.707	-20.179	270.15833	-59.7	9.7	-79.9	31.5	5.41706	0.874	-85.4	68.0	40.7	29.2	26.8	18.06319	2-3
4	-10.652	-19.334	282.20377	-63.9	10.8	-79.6	30.4	5.65710	0.830	-85.0	68.8	36.1	34.0	32.2	25.21040	3-4
5	-11.436	-19.156	290.28724	-57.0	11.5	-82.2	32.1	5.82067	0.802	-91.1	69.1	36.0	36.8	31.7	24.33836	4-5
6	-11.458	-20.035	277.49268	-52.2	10.3	-82.2	33.2	5.56267	0.847	-91.0	68.2	40.6	32.3	26.2	26.11359	5-6
7	-10.707	-20.179	270.15833	-59.7	9.7	-79.9	31.5	5.41706	0.874	-85.4	68.0	40.7	29.2	26.8	23.15331	6-7

JULY 31, 1964 13 HR 24 MIN 6 SEC 539 MS TAB NO 95 ATLAS PHOTO NO 95 POD SEQUENCE NO 857

TRAJECTORY DATA SEC TO IMPACT 102.261 ALT 236.34258 LAT -9.199 LON -23.699 R 1971.798 V 2.482 PTH -66.190 AZ 115.311

PHOTO DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.052	-19.701	274.91054	-58.2	10.6	-81.0	31.8	5.52132	0.839	-88.1	68.5	38.3	33.0	29.3	0.	1-2
3	-10.707	-20.184	265.92543	-59.7	9.7	-79.9	31.5	5.33218	0.874	-85.4	68.0	40.7	29.2	26.7	17.77844	2-3
4	-10.653	-19.353	277.77579	-63.8	10.8	-79.6	30.4	5.56833	0.830	-85.0	68.8	36.1	34.0	32.2	24.81215	3-4
5	-11.424	-19.177	285.72820	-57.0	11.5	-82.2	32.1	5.72925	0.802	-91.1	69.0	36.0	36.8	31.7	23.95492	4-5
6	-11.446	-20.042	273.14225	-52.3	10.3	-82.2	33.2	5.47546	0.847	-91.0	68.2	40.6	32.3	26.2	25.69998	5-6
7	-10.707	-20.184	265.92543	-59.7	9.7	-79.9	31.5	5.33218	0.874	-85.4	68.0	40.7	29.2	26.7	22.78953	6-7

JULY 31, 1964 13 HR 24 MIN 8 SEC 218 MS TAB NO 96 ATLAS PHOTO NO 96 POD SEQUENCE NO 859

TRAJECTORY DATA SEC TO IMPACT 100.581 ALT 232.52660 LAT -9.220 LON -23.654 R 1967.982 V 2.484 PTH -66.160 AZ 115.304

PHOTO DATA

PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-11.046	-19.714	270.52721	-58.2	10.6	-81.0	31.8	5.43328	0.839	-88.1	68.5	38.3	32.9	29.3	0.	1-2
3	-10.706	-20.189	261.68832	-59.7	9.7	-79.9	31.5	5.24722	0.874	-85.4	68.0	40.7	29.2	26.7	17.49358	2-3
4	-10.653	-19.371	273.34357	-63.8	10.8	-79.6	30.4	5.47549	0.830	-85.0	68.8	36.1	34.0	32.2	24.41356	3-4
5	-11.413	-19.198	281.16490	-57.0	11.5	-82.2	32.1	5.63775	0.803	-91.1	69.0	36.0	36.7	31.7	23.57117	4-5
6	-11.434	-20.049	268.78753	-52.3	10.3	-82.2	33.2	5.38816	0.847	-91.0	68.2	40.6	32.3	26.2	25.28607	5-6
7	-10.706	-20.189	261.68832	-59.7	9.7	-79.9	31.5	5.24722	0.874	-85.4	68.0	40.7	29.2	26.7	22.42552	6-7

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JULY 31, 1964 13 HR 24 MIN 19 SEC 978 MS TAB NO 103 ATLAS PHOTO NO 103 POD SEQUENCE NO 873

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				88.822	205.75533	-9.369	-23.335	1941.211	2.498	-65.949	115.248
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-11.005	-19.804	239.72751	-58.2	10.5	-80.9	31.8	4.81470	0.84C	-88.1	68.4 38.3 32.8 29.2 0. 1-2
3	-10.704	-20.225	231.91352	-59.6	9.7	-79.9	31.5	4.65020	0.874	-85.4	67.9 40.7 29.2 26.7 15.49293 2-3
4	-10.656	-19.501	242.20235	-63.7	10.8	-79.6	30.6	4.85523	0.831	-85.0	68.7 36.1 33.9 32.1 21.61518 3-4
5	-11.329	-19.348	249.10727	-56.9	11.4	-82.1	32.1	4.99495	0.804	-91.1	68.9 36.0 36.6 31.5 20.87637 4-5
6	-11.348	-20.101	238.18941	-52.3	10.2	-82.2	33.1	4.77480	0.848	-91.0	68.1 40.6 32.2 26.2 22.38113 5-6
7	-10.704	-20.225	231.91352	-59.6	9.7	-79.9	31.5	4.65020	0.874	-85.4	67.9 40.7 29.2 26.7 19.86831 6-7

JULY 31, 1964 13 HR 24 MIN 21 SEC 658 MS TAB NO 104 ATLAS PHOTO NO 104 POD SEQUENCE NO 875

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				87.142	201.92233	-9.390	-23.289	1937.378	2.500	-65.918	115.240
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.999	-19.817	235.31075	-58.2	10.5	-80.9	31.8	4.72599	0.84C	-88.1	68.4 38.3 32.8 29.2 0. 1-2
3	-10.703	-20.231	227.64339	-59.6	9.7	-79.9	31.6	4.56457	0.874	-85.4	67.9 40.7 29.2 26.7 15.20622 2-3
4	-10.657	-19.519	237.73636	-63.7	10.8	-79.6	30.6	4.76572	0.832	-85.0	68.6 36.1 33.9 32.0 21.21421 3-4
5	-11.317	-19.370	244.51105	-56.9	11.4	-82.1	32.1	4.90279	0.805	-91.1	68.8 36.0 36.5 31.5 20.49018 4-5
6	-11.336	-20.109	233.80160	-52.3	10.2	-82.2	33.1	4.68684	0.848	-91.0	68.1 40.6 32.2 26.2 21.96502 5-6
7	-10.703	-20.231	227.64339	-59.6	9.7	-79.9	31.6	4.56457	0.874	-85.4	67.9 40.7 29.2 26.7 19.50174 6-7

JULY 31, 1964 13 HR 24 MIN 23 SEC 338 MS TAB NO 105 ATLAS PHOTO NO 105 POD SEQUENCE NO 877

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				85.462	198.08708	-9.412	-23.242	1933.542	2.502	-65.888	115.232
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.993	-19.831	230.88968	-58.1	10.5	-80.9	31.9	4.63720	0.84C	-88.1	68.4 38.3 32.8 29.2 0. 1-2
3	-10.702	-20.236	223.36902	-59.6	9.7	-79.9	31.6	4.47887	0.874	-85.4	67.9 40.7 29.2 26.7 14.91928 2-3
4	-10.657	-19.538	233.26731	-63.7	10.8	-79.6	30.6	4.67612	0.832	-84.9	68.6 36.1 33.9 32.0 20.81293 3-4
5	-11.305	-19.392	239.91061	-56.9	11.4	-82.1	32.1	4.81055	0.805	-91.1	68.8 36.0 36.5 31.5 20.10369 4-5
6	-11.323	-20.117	229.40746	-52.3	10.2	-82.2	33.1	4.59879	0.848	-91.0	68.1 40.6 32.2 26.2 21.54888 5-6
7	-10.702	-20.236	223.36902	-59.6	9.7	-79.9	31.6	4.47887	0.874	-85.4	67.9 40.7 29.2 26.7 19.13485 6-7

JULY 31, 1964 13 HR 24 MIN 25 SEC 17 MS TAB NO 106 ATLAS PHOTO NO 106 POD SEQUENCE NO 879

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				83.782	194.24963	-9.433	-23.195	1929.705	2.504	-65.857	115.224
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.986	-19.844	226.46432	-58.1	10.5	-80.9	31.9	4.54832	0.841	-88.1	68.3 38.3 32.8 29.2 0. 1-2
3	-10.701	-20.247	214.80783	-59.6	9.7	-79.9	31.6	4.39307	0.875	-85.4	67.9 40.7 29.2 26.7 14.63208 2-3
4	-10.657	-19.557	228.79343	-63.7	10.8	-79.5	30.6	4.58644	0.832	-84.9	68.6 36.1 33.8 32.0 20.41135 3-4
5	-11.293	-19.413	235.30590	-56.9	11.4	-82.1	32.1	4.71822	0.805	-91.1	68.8 36.0 36.5 31.5 19.71679 4-5
6	-11.311	-20.125	225.01306	-52.3	10.2	-82.2	33.1	4.51066	0.848	-91.0	68.1 40.6 32.1 26.2 21.13204 5-6
7	-10.702	-20.241	219.09041	-59.6	9.7	-79.9	31.6	4.39307	0.875	-85.4	67.9 40.7 29.2 26.7 18.76766 6-7

JULY 31, 1964 13 HR 24 MIN 26 SEC 697 MS TAB NO 107 ATLAS PHOTO NO 107 POD SEQUENCE NO 881

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				82.102	190.41023	-9.455	-23.148	1925.866	2.506	-65.826	115.215
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.980	-19.857	222.03493	-58.1	10.5	-80.9	31.9	4.45936	0.841	-88.1	68.3 38.3 32.8 29.2 0. 1-2
3	-10.701	-20.247	214.80783	-59.6	9.7	-79.9	31.6	4.30720	0.875	-85.4	67.9 40.7 29.2 26.7 14.34463 2-3
4	-10.657	-19.576	224.31561	-63.7	10.8	-79.5	30.6	4.49668	0.832	-84.9	68.6 36.1 33.8 32.0 20.00954 3-4
5	-11.280	-19.435	230.69727	-56.9	11.4	-82.1	32.1	4.62581	0.805	-91.1	68.8 36.0 36.5 31.4 19.32970 4-5
6	-11.299	-20.132	220.61263	-52.4	10.2	-82.2	33.1	4.42245	0.848	-91.0	68.1 40.6 32.1 26.1 20.71515 5-6
7	-10.701	-20.247	214.80783	-59.6	9.7	-79.9	31.6	4.30720	0.875	-85.4	67.9 40.7 29.2 26.7 18.39995 6-7

JULY 31, 1964 13 HR 24 MIN 28 SEC 377 MS TAB NO 108 ATLAS PHOTO NO 108 POD SEQUENCE NO 883

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
				80.422	186.56853	-9.477	-23.101	1922.024	2.508	-65.795	115.207
PHOTO DATA											
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA SCALE PT-PT
2	-10.974	-19.871	217.60112	-58.1	10.5	-80.9	31.9	4.37031	0.841	-88.1	68.3 38.3 32.8 29.2 0. 1-2
3	-10.701	-20.253	210.52085	-59.6	9.7	-79.9	31.6	4.22124	0.875	-85.4	67.9 40.7 29.2 26.7 14.05702 2-3
4	-10.658	-19.595	219.83343	-63.6	10.8	-79.5	30.7	4.40683	0.832	-84.9	68.6 36.1 33.8 32.0 19.60742 3-4
5	-11.268	-19.457	226.08426	-56.9	11.4	-82.1	32.1	4.53331	0.806	-91.1	68.8 36.0 36.4 31.4 18.94221 4-5
6	-11.286	-20.140	216.20779	-52.4	10.2	-82.2	33.1	4.33415	0.848	-91.0	68.1 40.6 32.1 26.1 20.29800 5-6
7	-10.701	-20.253	210.52085	-59.6	9.7	-79.9	31.6	4.22124	0.875	-85.4	67.9 40.7 29.2 26.7 18.03213 6-7

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JULY 31, 1964 13 HR 24 MIN 30 SEC 57 MS TAB NO 109 ATLAS PHOTO NO 109 POD SEQUENCE NO 885

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				78.742	182.72473	-9.499	-23.054	1918.180	2.510	-65.764	115.199			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.968	-19.884	213.16085	-58.1	10.5	-80.9	31.9	4.28113	0.841	-88.1	68.3	38.3	32.8	29.1
3	-10.700	-20.258	206.22786	-59.6	9.7	-79.8	31.6	4.13516	0.875	-85.4	67.9	40.7	29.2	26.7
4	-10.658	-19.615	215.34477	-63.6	10.8	-79.5	30.7	4.31685	0.832	-84.9	68.5	36.1	33.8	31.9
5	-11.256	-19.479	221.46442	-56.9	11.4	-82.1	32.1	4.44067	0.806	-91.1	68.7	36.0	36.4	31.4
6	-11.273	-20.158	211.79656	-52.4	10.2	-82.2	33.1	4.24573	0.848	-91.0	68.1	40.6	32.1	26.1
7	-10.700	-20.258	206.22786	-59.6	9.7	-79.8	31.6	4.13516	0.875	-85.4	67.9	40.7	29.2	26.7

JULY 31, 1964 13 HR 24 MIN 31 SEC 737 MS TAB NO 110 ATLAS PHOTO NO 110 POD SEQUENCE NO 887

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				77.062	178.87857	-9.521	-23.006	1914.334	2.512	-65.733	115.190			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.961	-19.898	208.71541	-58.1	10.5	-80.9	31.9	4.19185	0.841	-88.1	68.3	38.3	32.7	29.1
3	-10.694	-20.264	201.92986	-59.6	9.7	-79.8	31.6	4.04898	0.875	-85.4	67.9	40.7	29.2	26.7
4	-10.658	-19.634	210.85038	-63.6	10.8	-79.5	30.7	4.22677	0.833	-84.9	68.5	36.1	33.8	31.9
5	-11.243	-19.502	216.83936	-56.9	11.4	-82.1	32.2	4.34794	0.806	-91.1	68.7	36.0	36.4	31.4
6	-11.260	-20.157	207.38019	-52.4	10.2	-82.2	33.0	4.15720	0.849	-91.0	68.1	40.6	32.1	26.1
7	-10.694	-20.264	201.92986	-59.6	9.7	-79.8	31.6	4.04898	0.875	-85.4	67.9	40.7	29.2	26.7

JULY 31, 1964 13 HR 24 MIN 33 SEC 417 MS TAB NO 111 ATLAS PHOTO NO 111 POD SEQUENCE NO 889

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				75.382	175.03044	-9.543	-22.959	1910.486	2.514	-65.701	115.182			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.955	-19.912	204.26602	-58.1	10.5	-80.9	31.9	4.10249	0.841	-88.1	68.3	38.3	32.7	29.1
3	-10.698	-20.270	197.62795	-59.6	9.7	-79.8	31.6	3.96272	0.875	-85.4	67.9	40.7	29.1	26.6
4	-10.658	-19.653	206.35333	-63.6	10.8	-79.5	30.7	4.13661	0.833	-84.9	68.5	36.1	33.7	31.9
5	-11.231	-19.524	212.21045	-56.9	11.4	-82.1	32.2	4.25512	0.807	-91.1	68.7	36.0	36.4	31.3
6	-11.248	-20.165	202.95988	-52.4	10.2	-82.2	33.0	4.06859	0.849	-91.0	68.1	40.6	32.1	26.1
7	-10.698	-20.270	197.62795	-59.6	9.7	-79.8	31.6	3.96272	0.875	-85.4	67.9	40.7	29.1	26.6

JULY 31, 1964 13 HR 24 MIN 35 SEC 97 MS TAB NO 112 ATLAS PHOTO NO 112 POD SEQUENCE NO 891

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				73.703	171.18001	-9.566	-22.911	1906.635	2.516	-65.670	115.173			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.949	-19.926	199.81229	-58.1	10.5	-80.9	31.9	4.01304	0.841	-88.1	68.3	38.3	32.7	29.1
3	-10.698	-20.276	193.32170	-59.6	9.7	-79.8	31.6	3.87638	0.875	-85.4	67.9	40.7	29.1	26.6
4	-10.658	-19.673	201.85139	-63.6	10.8	-79.5	30.7	4.04636	0.833	-84.9	68.5	36.1	33.7	31.9
5	-11.219	-19.546	207.57730	-56.9	11.4	-82.1	32.2	4.16222	0.807	-91.1	68.7	36.0	36.3	31.3
6	-11.235	-20.173	198.53521	-52.4	10.2	-82.2	33.0	3.97959	0.849	-91.0	68.1	40.6	32.1	26.1
7	-10.698	-20.276	193.32170	-59.6	9.7	-79.8	31.6	3.87638	0.875	-85.4	67.9	40.7	29.1	26.6

JULY 31, 1964 13 HR 24 MIN 36 SEC 777 MS TAB NO 113 ATLAS PHOTO NO 113 POD SEQUENCE NO 893

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				72.023	167.32738	-9.588	-22.863	1902.783	2.518	-65.638	115.165			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.942	-19.939	195.35436	-58.1	10.5	-80.9	31.9	3.92351	0.842	-88.1	68.3	38.3	32.7	29.1
3	-10.697	-20.282	189.01130	-59.6	9.7	-79.8	31.6	3.76995	0.875	-85.4	67.9	40.7	29.1	26.6
4	-10.658	-19.692	197.34534	-63.6	10.8	-79.5	30.8	3.95603	0.833	-84.9	68.5	36.1	33.7	31.8
5	-11.206	-19.569	202.94003	-56.9	11.4	-82.1	32.2	4.06924	0.807	-91.1	68.6	36.0	36.3	31.3
6	-11.222	-20.181	194.10635	-52.4	10.2	-82.2	33.0	3.89111	0.849	-91.0	68.0	40.6	32.0	26.1
7	-10.697	-20.282	189.01130	-59.6	9.7	-79.8	31.6	3.78995	0.875	-85.4	67.9	40.7	29.1	26.6

JULY 31, 1964 13 HR 24 MIN 38 SEC 457 MS TAB NO 114 ATLAS PHOTO NO 114 POD SEQUENCE NO 895

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				70.343	163.47249	-9.610	-22.814	1898.928	2.520	-65.607	115.156			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.936	-19.953	190.89209	-58.1	10.5	-80.9	31.9	3.83389	0.842	-88.1	68.2	38.3	32.7	29.1
3	-10.696	-20.288	184.69658	-59.5	9.7	-79.8	31.6	3.70343	0.875	-85.4	67.9	40.7	29.1	26.6
4	-10.658	-19.712	192.83503	-63.6	10.8	-79.5	30.8	3.86562	0.833	-84.9	68.4	36.1	33.7	31.8
5	-11.193	-19.591	198.29852	-56.9	11.3	-82.1	32.2	3.97617	0.807	-91.1	68.6	36.0	36.3	31.3
6	-11.209	-20.190	189.67316	-52.4	10.2	-82.2	33.0	3.80224	0.849	-91.0	68.0	40.6	32.0	26.1
7	-10.696	-20.288	184.69658	-59.5	9.7	-79.8	31.6	3.70343	0.875	-85.4	67.9	40.7	29.1	26.6

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JULY 31, 1964 13 HR 24 MIN 40 SEC 137 MS TAB NO 115 ATLAS PHOTO NO 115 POD SEQUENCE NO 897

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				68.663	159.61540	-9.633	-22.766	1895.071	2.522	-65.575	115.147		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.929	-19.967	186.42560	-58.1	10.5	-80.9	31.9	3.74418	0.842	-88.1	68.2 38.3 32.7	29.0	0.
3	-10.695	-20.294	180.37767	-59.5	9.7	-79.8	31.6	3.61683	0.875	-85.4	67.9 40.7 29.1	26.6	12.03444
4	-10.658	-19.732	188.32058	-63.5	10.8	-79.5	30.8	3.77512	0.834	-84.9	68.4 36.1 33.7	31.8	16.78150
5	-11.181	-19.614	193.65290	-56.9	11.3	-82.1	32.2	3.88302	0.808	-91.1	68.6 36.0 36.3	31.2	16.21868
6	-11.196	-20.198	185.23575	-52.4	10.2	-82.2	33.0	3.71329	0.849	-91.0	68.0 40.6 32.0	26.1	17.36712
7	-10.695	-20.294	180.37767	-59.5	9.7	-79.8	31.6	3.61683	0.875	-85.4	67.9 40.7 29.1	26.6	15.44499

JULY 31, 1964 13 HR 24 MIN 41 SEC 816 MS TAB NO 116 ATLAS PHOTO NO 116 POD SEQUENCE NO 899

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				66.983	155.75620	-9.655	-22.717	1891.211	2.525	-65.543	115.139		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.923	-19.981	181.95492	-58.1	10.5	-80.9	31.9	3.65439	0.842	-88.1	68.2 38.3 32.6	29.0	0.
3	-10.694	-20.300	176.05458	-59.5	9.7	-79.8	31.7	3.53015	0.875	-85.4	67.9 40.7 29.1	26.6	11.74466
4	-10.658	-19.751	183.80201	-63.5	10.8	-79.5	30.8	3.68454	0.834	-84.9	68.4 36.1 33.6	31.8	16.37669
5	-11.168	-19.637	189.00319	-56.9	11.3	-82.1	32.2	3.78978	0.808	-91.1	68.6 36.0 36.2	31.2	15.82832
6	-11.183	-20.207	180.79414	-52.4	10.2	-82.3	33.0	3.62425	0.849	-91.0	68.0 40.6 32.0	26.1	16.94744
7	-10.694	-20.300	176.05458	-59.5	9.7	-79.8	31.7	3.53015	0.875	-85.4	67.9 40.7 29.1	26.6	15.07411

JULY 31, 1964 13 HR 24 MIN 43 SEC 496 MS TAB NO 117 ATLAS PHOTO NO 117 POD SEQUENCE NO 901

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				65.303	151.89465	-9.678	-22.668	1887.350	2.527	-65.511	115.130		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.916	-19.995	177.47982	-58.1	10.5	-80.9	31.9	3.56451	0.842	-88.1	68.2 38.3 32.6	29.0	0.
3	-10.693	-20.306	171.72713	-59.5	9.7	-79.8	31.7	3.44337	0.875	-85.4	67.9 40.7 29.1	26.6	11.45461
4	-10.658	-19.771	179.27909	-63.5	10.8	-79.5	30.8	3.59388	0.834	-84.9	68.4 36.1 33.6	31.8	15.97157
5	-11.156	-19.659	184.34914	-56.9	11.3	-82.1	32.2	3.69646	0.808	-91.1	68.5 36.0 36.2	31.2	15.43758
6	-11.170	-20.215	176.34812	-52.4	10.1	-82.3	33.0	3.53513	0.850	-91.0	68.0 40.6 32.0	26.0	16.52746
7	-10.693	-20.306	171.72713	-59.5	9.7	-79.8	31.7	3.44337	0.875	-85.4	67.9 40.7 29.1	26.6	14.70283

JULY 31, 1964 13 HR 24 MIN 45 SEC 176 MS TAB NO 118 ATLAS PHOTO NO 118 POD SEQUENCE NO 903

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				63.623	148.03087	-9.701	-22.619	1883.486	2.529	-65.479	115.121		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.909	-20.009	173.00432	-58.1	10.5	-80.9	31.9	3.47463	0.842	-88.1	68.2 38.3 32.6	29.0	0.
3	-10.692	-20.312	167.39869	-59.5	9.7	-79.8	31.7	3.35658	0.875	-85.4	67.9 40.7 29.1	26.6	11.16482
4	-10.658	-19.791	174.75613	-63.5	10.8	-79.5	30.9	3.50321	0.834	-84.9	68.4 36.1 33.6	31.7	15.56690
5	-11.143	-19.682	179.69551	-56.9	11.3	-82.1	32.2	3.60315	0.808	-91.1	68.5 36.0 36.2	31.2	15.04715
6	-11.157	-20.224	171.90144	-52.4	10.1	-82.3	33.0	3.44599	0.850	-91.0	68.0 40.6 32.0	26.0	16.10803
7	-10.692	-20.312	167.39869	-59.5	9.7	-79.8	31.7	3.35658	0.875	-85.4	67.9 40.7 29.1	26.6	14.33172

JULY 31, 1964 13 HR 24 MIN 46 SEC 856 MS TAB NO 119 ATLAS PHOTO NO 119 POD SEQUENCE NO 905

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				61.943	144.16487	-9.723	-22.570	1879.620	2.531	-65.446	115.112		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.903	-20.023	168.52513	-58.1	10.5	-80.9	31.9	3.38467	0.842	-88.1	68.2 38.3 32.6	29.0	0.
3	-10.691	-20.318	163.06648	-59.5	9.7	-79.8	31.7	3.26972	0.875	-85.4	67.9 40.7 29.1	26.6	10.87490
4	-10.658	-19.810	170.22460	-63.5	10.8	-79.5	30.9	3.41247	0.834	-84.9	68.4 36.1 33.6	31.7	15.16205
5	-11.130	-19.704	175.03839	-56.9	11.3	-82.1	32.2	3.50977	0.809	-91.1	68.5 36.0 36.2	31.2	14.65645
6	-11.144	-20.232	167.45103	-52.4	10.1	-82.3	32.9	3.35677	0.850	-91.0	68.0 40.6 32.0	26.0	15.68845
7	-10.691	-20.318	163.06648	-59.5	9.7	-79.8	31.7	3.26972	0.875	-85.4	67.9 40.7 29.1	26.6	13.96022

JULY 31, 1964 13 HR 24 MIN 48 SEC 536 MS TAB NO 120 ATLAS PHOTO NO 120 POD SEQUENCE NO 907

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ		
				60.263	140.29669	-9.746	-22.520	1875.752	2.533	-65.414	115.103		
PHOTO DATA													
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ EMIS ALPHA	SCALE	PT-PT
2	-10.896	-20.037	164.04141	-58.1	10.5	-80.9	31.9	3.29462	0.843	-88.1	68.2 38.3 32.6	29.0	0.
3	-10.690	-20.324	158.72984	-59.5	9.7	-79.8	31.7	3.18276	0.875	-85.4	67.9 40.7 29.1	26.6	10.58464
4	-10.658	-19.830	165.69860	-63.5	10.8	-79.5	30.9	3.32164	0.835	-84.9	68.3 36.1 33.6	31.7	14.75687
5	-11.117	-19.727	170.37660	-56.9	11.3	-82.1	32.2	3.41630	0.809	-91.1	68.5 36.0 36.1	31.1	14.26544
6	-11.131	-20.240	162.99611	-52.5	10.1	-82.3	32.9	3.26747	0.850	-91.0	68.0 40.6 31.9	26.0	15.26857
7	-10.690	-20.324	158.72984	-59.5	9.7	-79.8	31.7	3.18276	0.875	-85.4	67.9 40.7 29.1	26.6	13.58830

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TAB NO 121 ATLAS PHOTO NO 121 POD SEQUENCE NO 909
 JULY 31, 1964 13 HR 24 MIN 50 SEC 216 MS

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		56.583	136.42632	-9.769	-22.470	1871.882	2.535	-65.381	115.094

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-10.889	-20.051	159.55314	-58.1	10.5	-80.9	31.9	3.20447	0.843	-88.1	68.1	38.3	32.6	28.0	1-2
3	-10.689	-20.331	154.38868	-59.5	9.7	-79.8	31.7	3.09571	0.875	-85.4	67.8	40.7	29.1	26.6	2-3
4	-10.657	-19.850	161.16312	-63.4	10.8	-79.5	30.9	3.23072	0.835	-84.9	68.3	36.1	33.6	31.7	3-4
5	-11.105	-19.749	165.71072	-56.9	11.3	-82.1	32.2	3.32274	0.809	-91.1	68.5	36.0	36.1	31.1	4-5
6	-11.118	-20.249	158.53666	-52.5	10.1	-82.3	32.9	3.17807	0.850	-91.0	68.0	40.6	31.9	26.0	5-6
7	-10.689	-20.331	154.38868	-59.5	9.7	-79.8	31.7	3.09571	0.875	-85.4	67.8	40.7	29.1	26.6	6-7

TAB NO 122 ATLAS PHOTO NO 122 POD SEQUENCE NO 911
 JULY 31, 1964 13 HR 24 MIN 51 SEC 896 MS

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		56.904	132.55368	-9.792	-22.420	1868.009	2.537	-65.349	115.085

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-10.883	-20.065	155.06021	-58.1	10.5	-80.9	31.9	3.11424	0.843	-88.1	68.1	38.3	32.6	28.9	1-2
3	-10.689	-20.337	150.04294	-59.5	9.7	-79.8	31.7	3.00858	0.875	-85.4	67.8	40.7	29.1	26.6	2-3
4	-10.657	-19.849	156.62302	-63.4	10.8	-79.4	30.9	3.13971	0.835	-84.9	68.3	36.1	33.5	31.7	3-4
5	-11.092	-19.772	161.04004	-56.9	11.3	-82.0	32.2	3.22908	0.809	-91.1	68.4	36.0	36.1	31.1	4-5
6	-11.105	-20.257	154.07257	-52.5	10.1	-82.3	32.9	3.08859	0.850	-91.0	68.0	40.6	31.9	26.0	5-6
7	-10.688	-20.337	150.04294	-59.5	9.7	-79.8	31.7	3.00858	0.875	-85.4	67.8	40.7	29.1	26.6	6-7

TAB NO 123 ATLAS PHOTO NO 123 POD SEQUENCE NO 912
 JULY 31, 1964 13 HR 24 MIN 52 SEC 736 MS

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		56.064	130.61639	-9.804	-22.395	1866.072	2.538	-65.332	115.081

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-10.879	-20.072	152.81188	-58.1	10.5	-80.9	31.9	3.06908	0.843	-88.1	68.1	38.3	32.6	28.9	1-2
3	-10.687	-20.340	147.86823	-59.5	9.7	-79.8	31.7	2.96497	0.875	-85.4	67.8	40.7	29.1	26.6	2-3
4	-10.657	-19.879	154.35111	-63.4	10.8	-79.4	30.9	3.09417	0.835	-84.9	68.3	36.1	33.5	31.7	3-4
5	-11.085	-19.783	158.70284	-56.9	11.3	-82.0	32.2	3.18222	0.810	-91.1	68.4	36.0	36.1	31.1	4-5
6	-11.098	-20.262	151.83867	-52.5	10.1	-82.3	32.9	3.04381	0.850	-91.0	68.0	40.6	31.9	26.0	5-6
7	-10.687	-20.340	147.86823	-59.5	9.7	-79.8	31.7	2.96497	0.875	-85.4	67.8	40.7	29.1	26.6	6-7

TAB NO 124 ATLAS PHOTO NO 124 POD SEQUENCE NO 913
 JULY 31, 1964 13 HR 24 MIN 53 SEC 576 MS

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		55.224	128.67860	-9.816	-22.370	1864.134	2.539	-65.316	115.076

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-10.876	-20.079	150.56242	-58.1	10.5	-80.9	31.9	3.02390	0.843	-88.1	68.1	38.3	32.5	28.9	1-2
3	-10.687	-20.343	145.69241	-59.5	9.7	-79.8	31.7	2.92134	0.875	-85.4	67.8	40.7	29.1	26.6	2-3
4	-10.657	-19.889	152.07812	-63.4	10.8	-79.4	31.0	3.04860	0.835	-84.9	68.3	36.1	33.5	31.6	3-4
5	-11.079	-19.795	156.36454	-56.9	11.3	-82.0	32.2	3.13533	0.810	-91.1	68.4	36.0	36.1	31.1	4-5
6	-11.092	-20.266	149.60365	-52.5	10.1	-82.3	32.9	2.99900	0.850	-91.0	67.9	40.6	31.9	26.0	5-6
7	-10.687	-20.343	145.69241	-59.5	9.7	-79.8	31.7	2.92134	0.875	-85.4	67.8	40.7	29.1	26.6	6-7

TAB NO 125 ATLAS PHOTO NO 125 POD SEQUENCE NO 914
 JULY 31, 1964 13 HR 24 MIN 54 SEC 416 MS

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		54.384	126.74040	-9.827	-22.345	1862.196	2.540	-65.299	115.072

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-10.872	-20.086	148.31200	-58.1	10.5	-80.9	31.9	2.97870	0.843	-88.1	68.1	38.3	32.5	28.9	1-2
3	-10.686	-20.346	143.51562	-59.5	9.7	-79.8	31.7	2.87769	0.875	-85.4	67.8	40.7	29.1	26.6	2-3
4	-10.657	-19.899	149.80416	-63.4	10.8	-79.4	31.0	3.00302	0.835	-84.9	68.3	36.1	33.5	31.6	3-4
5	-11.072	-19.806	154.02529	-56.9	11.3	-82.0	32.2	3.08843	0.810	-91.1	68.4	36.0	36.0	31.1	4-5
6	-11.085	-20.270	147.36765	-52.5	10.1	-82.3	32.9	2.95418	0.850	-91.0	67.9	40.6	31.9	26.0	5-6
7	-10.686	-20.346	143.51562	-59.5	9.7	-79.8	31.7	2.87769	0.875	-85.4	67.8	40.7	29.1	26.6	6-7

TAB NO 126 ATLAS PHOTO NO 126 POD SEQUENCE NO 915
 JULY 31, 1964 13 HR 24 MIN 55 SEC 256 MS

TRAJECTORY DATA		SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
		53.544	124.80147	-9.839	-22.320	1860.257	2.542	-65.283	115.067

PHOTO DATA		RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
PT	LAT	LON													
2	-10.869	-20.094	146.06020	-58.1	10.5	-80.9	31.9	2.93348	0.843	-88.1	68.1	38.3	32.5	28.9	1-2
3	-10.686	-20.349	141.33751	-59.5	9.7	-79.8	31.7	2.83402	0.875	-85.4	67.8	40.7	29.1	26.6	2-3
4	-10.657	-19.909	147.52884	-63.4	10.8	-79.4	31.0	2.95741	0.835	-84.9	68.3	36.1	33.5	31.6	3-4
5	-11.066	-19.818	151.68469	-56.9	11.3	-82.0	32.2	3.04149	0.810	-91.1	68.4	36.0	36.0	31.0	4-5
6	-11.078	-20.274	145.13030	-52.5	10.1	-82.3	32.9	2.90933	0.850	-91.0	67.9	40.6	31.9	26.0	5-6
7	-10.686	-20.349	141.33751	-59.5	9.7	-79.8	31.7	2.83402	0.875	-85.4	67.8	40.7	29.1	26.6	6-7

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JULY 31, 1964 13 HR 24 MIN 56 SEC 96 MS

TAB NO 127

ATLAS PHOTO NO 127

POD SEQUENCE NO 916

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										52.704	122.86215	-9.850	-22.294	1858.317	2.543	-65.266	115.062
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.866	-20.101	143.80746	-58.1	10.5	-80.9	31.9	2.88824	0.843	-88.1	68.1	38.3	32.5	28.9	0.	1-2	
3	-10.685	-20.353	139.15843	-59.5	9.7	-79.8	31.7	2.79033	0.875	-85.4	67.8	40.7	29.1	26.5	9.27551	2-3	
4	-10.656	-19.919	145.25259	-63.4	10.8	-79.4	31.0	2.91178	0.835	-84.9	68.2	36.1	33.5	31.6	12.92956	3-4	
5	-11.059	-19.829	149.34315	-56.9	11.3	-82.0	32.2	2.99454	0.810	-91.1	68.4	36.0	36.0	31.0	12.50140	4-5	
6	-11.072	-20.279	142.89199	-52.5	10.1	-82.3	32.9	2.86446	0.850	-91.0	67.9	40.6	31.9	26.0	13.37538	5-6	
7	-10.685	-20.353	139.15843	-59.5	9.7	-79.8	31.7	2.79033	0.875	-85.4	67.8	40.7	29.1	26.5	11.91045	6-7	

JULY 31, 1964 13 HR 24 MIN 56 SEC 936 MS

TAB NO 128

ATLAS PHOTO NO 128

POD SEQUENCE NO 917

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										51.864	120.92181	-9.862	-22.269	1856.377	2.544	-65.250	115.058
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.862	-20.108	141.55300	-58.1	10.5	-80.9	31.9	2.84296	0.843	-88.1	68.1	38.3	32.5	28.9	0.	1-2	
3	-10.684	-20.356	136.97768	-59.5	9.7	-79.8	31.7	2.74660	0.875	-85.4	67.8	40.7	29.1	26.5	9.12971	2-3	
4	-10.656	-19.929	142.97464	-63.4	10.8	-79.4	31.0	2.86611	0.835	-84.9	68.2	36.1	33.5	31.6	12.72609	3-4	
5	-11.053	-19.840	146.99989	-56.9	11.3	-82.0	32.2	2.94756	0.810	-91.1	68.4	36.0	36.0	31.0	12.30488	4-5	
6	-11.065	-20.283	140.65199	-52.5	10.1	-82.3	32.9	2.81956	0.850	-91.0	67.9	40.6	31.9	26.0	13.16461	5-6	
7	-10.684	-20.356	136.97768	-59.5	9.7	-79.8	31.7	2.74660	0.875	-85.4	67.8	40.7	29.1	26.5	11.72360	6-7	

JULY 31, 1964 13 HR 24 MIN 57 SEC 775 MS

TAB NO 129

ATLAS PHOTO NO 129

POD SEQUENCE NO 918

TRAJECTORY DATA				SEC TO IMPACT				ALT	LAT	LON	R	V	PTH	AZ		
				51.024				118.98141	-9.874	-22.243	1854.437	2.545	-65.233	115.053		
PHOTO DATA																
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.859	-20.115	139.29796	-58.1	10.5	-80.9	31.9	2.79767	0.843	-88.1	68.1	38.3	32.5	28.9	0.	1-2
3	-10.684	-20.359	134.79634	-59.5	9.7	-79.8	31.7	2.70286	0.876	-85.4	67.8	40.7	29.1	26.5	8.98390	2-3
4	-10.656	-19.939	140.69613	-63.4	10.8	-79.4	31.0	2.82044	0.835	-84.9	68.2	36.1	33.5	31.6	12.52256	3-4
5	-11.046	-19.652	144.65609	-56.9	11.3	-82.0	32.2	2.90056	0.810	-91.1	68.3	36.0	36.0	31.0	12.10837	4-5
6	-11.058	-20.288	138.41141	-52.5	10.1	-82.3	32.9	2.77464	0.851	-91.0	67.9	40.6	31.9	26.0	12.95381	5-6
7	-10.684	-20.359	134.79634	-59.5	9.7	-79.8	31.7	2.70286	0.876	-85.4	67.8	40.7	29.1	26.5	11.53665	6-7

JULY 31, 1964 13 HR 24 MIN 58 SEC 615 MS

TAB NO 130

ATLAS PHOTO NO 130

POD SEQUENCE NO 919

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
PHOTO DATA										50.184	117.04004	-9.886	-22.218	1852.495	2.546	-65.216	115.048
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.855	-20.122	137.04129	-58.1	10.5	-80.9	31.9	2.75234	0.843	-88.1	68.1	38.3	32.5	28.9	0.	1-2	
3	-10.683	-20.362	132.61340	-59.5	9.7	-79.8	31.7	2.65909	0.876	-85.4	67.8	40.7	29.1	26.5	8.83790	2-3	
4	-10.656	-19.949	138.41598	-63.4	10.8	-79.4	31.0	2.77473	0.836	-84.9	68.2	36.1	33.5	31.6	12.31894	3-4	
5	-11.040	-19.863	142.31065	-56.9	11.2	-82.0	32.2	2.85353	0.810	-91.1	68.3	36.0	36.0	31.0	11.91177	4-5	
6	-11.052	-20.292	136.16920	-52.5	10.1	-82.3	32.9	2.72949	0.851	-91.0	67.9	40.6	31.9	26.0	12.74292	5-6	
7	-10.683	-20.362	132.61340	-59.5	9.7	-79.8	31.7	2.65909	0.876	-85.4	67.8	40.7	29.1	26.5	11.34950	6-7	

JULY 31, 1964 13 HR 24 MIN 59 SEC 455 MS

TAB NO 131

ATLAS PHOTO NO 131

POD SEQUENCE NO 920

TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ			
					49.344		115.09836	-9.897	-22.192	1850.554	2.547	-65.200	115.044			
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.852	-20.129	134.78409	-58.1	10.5	-80.9	31.9	2.70701	0.843	-88.1	68.1	38.3	32.5	28.9	0.	1-2
3	-10.683	-20.365	130.42988	-59.5	9.7	-79.8	31.7	2.61531	0.876	-85.4	67.8	40.7	29.1	26.5	8.69203	2-3
4	-10.656	-19.959	136.13536	-63.4	10.8	-79.4	31.0	2.72901	0.836	-84.9	68.2	36.1	33.5	31.6	12.11531	3-4
5	-11.033	-19.875	139.96477	-56.9	11.2	-82.0	32.2	2.80649	0.811	-91.1	68.3	36.0	36.0	31.0	11.71507	4-5
6	-11.045	-20.296	133.92642	-52.5	10.1	-82.3	32.9	2.68473	0.851	-91.0	67.9	40.6	31.9	26.0	12.53201	5-6
7	-10.683	-20.365	130.42988	-59.5	9.7	-79.8	31.7	2.61531	0.876	-85.4	67.8	40.7	29.1	26.5	11.16245	6-7

JULY 31, 1964 13 HR 25 MIN 0 SEC 295 MS

TAB NO 132

ATLAS PHOTO NO 132

POD SEQUENCE NO 921

TRAJECTORY DATA										SEC TO IMPACT	ALT	LAT	LON	R	V	PTH	AZ
										48.504	113.15617	-9.909	-22.167	1848.611	2.548	-65.183	115.039
PHOTO DATA																	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.848	-20.137	132.52586	-58.1	10.5	-80.9	31.9	2.66166	0.843	-88.1	68.1	38.3	32.5	28.9	0.	1-2	
3	-10.682	-20.369	128.24533	-59.5	9.7	-79.8	31.7	2.57150	0.876	-85.4	67.8	40.7	29.1	26.5	8.54602	2-3	
4	-10.655	-19.969	133.85374	-63.4	10.8	-79.4	31.0	2.68327	0.836	-84.9	68.2	36.1	33.4	31.6	11.91162	3-4	
5	-11.027	-19.886	137.61790	-56.9	11.2	-82.0	32.2	2.75943	0.811	-91.1	68.3	36.0	36.0	31.0	11.51836	4-5	
6	-11.038	-20.301	131.68262	-52.5	10.1	-82.3	32.8	2.63975	0.851	-91.0	67.9	40.6	31.9	26.0	12.32108	5-6	
7	-10.682	-20.369	128.24533	-59.5	9.7	-79.8	31.7	2.57150	0.876	-85.4	67.8	40.7	29.1	26.5	10.97519	6-7	

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JULY 31, 1964 13 HR 25 MIN 1 SEC 135 MS														
TRAJECTORY DATA														
SEC TO IMPACT 47.664														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	PT-PT
2	-10.845	-20.144	130.26611	-58.1	10.5	-80.9	31.9	2.61627	0.844	-88.1	68.0	38.3	32.5	1-2
3	-10.681	-20.372	126.05931	-59.4	9.7	-79.8	31.7	2.52767	0.876	-85.4	67.8	40.7	29.1	2-3
4	-10.655	-19.980	131.57062	-63.3	10.8	-79.4	31.0	2.63751	0.836	-84.9	68.2	36.1	33.4	3-4
5	-11.020	-19.898	135.26951	-56.9	11.2	-82.0	32.2	2.71235	0.811	-91.1	68.3	36.0	35.9	4-5
6	-11.031	-20.305	129.43732	-52.5	10.1	-82.3	32.8	2.59474	0.851	-90.9	67.9	40.6	31.8	5-6
7	-10.681	-20.372	126.05931	-59.4	9.7	-79.8	31.7	2.52767	0.876	-85.4	67.8	40.7	29.1	6-7
JULY 31, 1964 13 HR 25 MIN 1 SEC 975 MS														
TRAJECTORY DATA														
SEC TO IMPACT 46.824														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	PT-PT
2	-10.841	-20.151	128.06527	-58.1	10.5	-80.9	31.9	2.57086	0.844	-88.1	68.0	38.3	32.5	1-2
3	-10.681	-20.375	123.87220	-59.4	9.7	-79.8	31.7	2.48382	0.876	-85.4	67.8	40.7	29.0	2-3
4	-10.655	-19.990	129.28642	-63.3	10.8	-79.4	31.0	2.59172	0.836	-84.9	68.2	36.1	33.4	3-4
5	-11.014	-19.910	132.92004	-56.9	11.2	-82.0	32.2	2.66524	0.811	-91.1	68.3	36.0	35.9	4-5
6	-11.025	-20.310	127.19091	-52.5	10.1	-82.3	32.8	2.54971	0.851	-90.9	67.9	40.6	31.8	5-6
7	-10.681	-20.375	123.87220	-59.4	9.7	-79.8	31.7	2.48382	0.876	-85.4	67.8	40.7	29.0	6-7
JULY 31, 1964 13 HR 25 MIN 2 SEC 815 MS														
TRAJECTORY DATA														
SEC TO IMPACT 45.984														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	PT-PT
2	-10.838	-20.158	125.74342	-58.1	10.5	-80.9	31.9	2.52544	0.844	-88.1	68.0	38.3	32.5	1-2
3	-10.680	-20.379	121.68407	-59.4	9.7	-79.8	31.7	2.43994	0.876	-85.4	67.8	40.7	29.0	2-3
4	-10.655	-20.000	127.00120	-63.3	10.8	-79.4	31.1	2.54591	0.836	-84.9	68.2	36.1	33.4	3-4
5	-11.007	-19.921	130.56957	-56.9	11.2	-82.0	32.2	2.61811	0.811	-91.1	68.3	36.0	35.9	4-5
6	-11.018	-20.314	124.94350	-52.5	10.1	-82.3	32.8	2.50466	0.851	-90.9	67.9	40.6	31.8	5-6
7	-10.680	-20.379	121.68407	-59.4	9.7	-79.8	31.7	2.43994	0.876	-85.4	67.8	40.7	29.0	6-7
JULY 31, 1964 13 HR 25 MIN 3 SEC 655 MS														
TRAJECTORY DATA														
SEC TO IMPACT 45.144														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	PT-PT
2	-10.834	-20.166	123.48014	-58.1	10.5	-80.9	31.9	2.47998	0.844	-88.1	68.0	38.3	32.5	1-2
3	-10.679	-20.382	119.49458	-59.4	9.7	-79.8	31.7	2.39604	0.876	-85.4	67.8	40.7	29.0	2-3
4	-10.655	-20.010	124.71459	-63.3	10.8	-79.4	31.1	2.50007	0.836	-84.9	68.2	36.1	33.4	3-4
5	-11.001	-19.933	128.21769	-56.9	11.2	-82.0	32.2	2.57095	0.811	-91.1	68.3	36.0	35.9	4-5
6	-11.011	-20.319	122.69469	-52.5	10.1	-82.3	32.8	2.45958	0.851	-90.9	67.9	40.6	31.8	5-6
7	-10.679	-20.382	119.49458	-59.4	9.7	-79.8	31.7	2.39604	0.876	-85.4	67.8	40.7	29.0	6-7
JULY 31, 1964 13 HR 25 MIN 4 SEC 495 MS														
TRAJECTORY DATA														
SEC TO IMPACT 44.304														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	PT-PT
2	-10.831	-20.173	121.21582	-58.1	10.5	-80.9	31.9	2.43450	0.844	-88.1	68.0	38.3	32.5	1-2
3	-10.679	-20.385	117.30402	-59.4	9.7	-79.8	31.7	2.35211	0.876	-85.4	67.8	40.7	29.0	2-3
4	-10.654	-20.020	122.42694	-63.3	10.8	-79.4	31.1	2.45421	0.836	-84.9	68.1	36.1	33.4	3-4
5	-10.994	-19.944	125.86479	-56.9	11.2	-82.0	32.1	2.52377	0.811	-91.0	68.3	36.0	35.9	4-5
6	-11.004	-20.323	120.44483	-52.6	10.1	-82.3	32.8	2.41448	0.851	-90.9	67.9	40.6	31.8	5-6
7	-10.679	-20.385	117.30402	-59.4	9.7	-79.8	31.7	2.35211	0.876	-85.4	67.8	40.7	29.0	6-7
JULY 31, 1964 13 HR 25 MIN 5 SEC 335 MS														
TRAJECTORY DATA														
SEC TO IMPACT 43.464														
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	PT-PT
2	-10.827	-20.180	118.95033	-58.1	10.5	-80.9	31.9	2.38900	0.844	-88.1	68.0	38.3	32.4	1-2
3	-10.678	-20.389	115.11232	-59.4	9.7	-79.8	31.7	2.30817	0.876	-85.4	67.8	40.7	29.0	2-3
4	-10.654	-20.030	120.13815	-63.3	10.8	-79.4	31.1	2.40833	0.836	-84.9	68.1	36.1	33.4	3-4
5	-10.987	-19.956	123.51075	-56.9	11.2	-82.0	32.1	2.47657	0.811	-91.0	68.2	36.0	35.9	4-5
6	-10.998	-20.328	118.19381	-52.6	10.1	-82.3	32.8	2.36936	0.851	-90.9	67.9	40.6	31.8	5-6
7	-10.678	-20.389	115.11232	-59.4	9.7	-79.8	31.7	2.30817	0.876	-85.4	67.8	40.7	29.0	6-7

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JULY 31, 1964 13 HR 25 MIN 6 SEC 175 MS

TAB NO 139

ATLAS PHOTO NO 139

POD SEQUENCE NO 928

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				42.624	99.54396	-9.992	-21.986	1834.999	2.556	-65.065	115.006			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.824	-20.188	116.68553	-58.1	10.5	-80.9	31.9	2.34348	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.677	-20.392	112.91934	-59.4	9.7	-79.8	31.8	2.26419	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.654	-20.040	117.84804	-63.3	10.8	-79.4	31.1	2.36242	0.836	-84.9	68.1	36.1	33.4	31.5
5	-10.981	-19.968	121.15539	-56.9	11.2	-82.0	32.1	2.42934	0.812	-91.0	68.2	36.0	35.9	30.9
6	-10.991	-20.332	115.94148	-52.6	10.1	-82.3	32.8	2.32420	0.851	-90.9	67.9	40.6	31.8	25.9
7	-10.677	-20.392	112.91934	-59.4	9.7	-79.8	31.8	2.26419	0.876	-85.4	67.8	40.7	29.0	26.5

JULY 31, 1964 13 HR 25 MIN 7 SEC 15 MS

TAB NO 140

ATLAS PHOTO NO 140

POD SEQUENCE NO 929

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				41.784	97.59680	-10.004	-21.960	1833.052	2.557	-65.049	115.001			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.820	-20.195	114.41519	-58.0	10.5	-80.9	32.0	2.29792	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.677	-20.395	110.72482	-59.4	9.7	-79.8	31.8	2.22019	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.654	-20.051	115.55640	-63.3	10.8	-79.4	31.1	2.31648	0.836	-84.9	68.1	36.1	33.4	31.5
5	-10.974	-19.975	118.79849	-56.9	11.2	-82.0	32.1	2.38208	0.812	-91.0	68.2	36.0	35.9	30.9
6	-10.984	-20.337	113.68762	-52.6	10.1	-82.3	32.8	2.27902	0.851	-90.9	67.9	40.6	31.8	25.9
7	-10.677	-20.395	110.72482	-59.4	9.7	-79.8	31.8	2.22019	0.876	-85.4	67.8	40.7	29.0	26.5

JULY 31, 1964 13 HR 25 MIN 7 SEC 855 MS

TAB NO 141

ATLAS PHOTO NO 141

POD SEQUENCE NO 930

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				40.945	95.64963	-10.016	-21.934	1831.105	2.558	-65.032	114.996			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.816	-20.202	112.14627	-58.0	10.5	-80.9	32.0	2.25235	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.676	-20.399	108.52975	-59.4	9.7	-79.8	31.8	2.17618	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.653	-20.061	113.26422	-63.3	10.8	-79.4	31.1	2.27053	0.836	-84.9	68.1	36.1	33.4	31.5
5	-10.968	-19.991	116.44106	-56.9	11.2	-82.0	32.1	2.33481	0.812	-91.0	68.2	36.0	35.9	30.9
6	-10.977	-20.341	111.43320	-52.6	10.1	-82.3	32.8	2.23383	0.851	-90.9	67.9	40.6	31.8	25.9
7	-10.676	-20.399	108.52975	-59.4	9.7	-79.8	31.8	2.17618	0.876	-85.4	67.8	40.7	29.0	26.5

JULY 31, 1964 13 HR 25 MIN 8 SEC 695 MS

TAB NO 142

ATLAS PHOTO NO 142

POD SEQUENCE NO 931

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				40.105	93.70135	-10.028	-21.908	1829.157	2.559	-65.015	114.992			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.813	-20.210	109.87556	-58.0	10.5	-80.9	32.0	2.20675	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.675	-20.402	106.33290	-59.4	9.7	-79.8	31.8	2.13213	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.653	-20.071	110.97024	-63.3	10.8	-79.4	31.1	2.22455	0.837	-84.9	68.1	36.1	33.4	31.5
5	-10.961	-20.003	114.08183	-56.9	11.2	-82.0	32.1	2.28750	0.812	-91.0	68.2	36.0	35.8	30.9
6	-10.970	-20.346	109.17697	-52.6	10.1	-82.3	32.8	2.18860	0.851	-90.9	67.9	40.6	31.8	25.9
7	-10.675	-20.402	106.33290	-59.4	9.7	-79.8	31.8	2.13213	0.876	-85.4	67.8	40.7	29.0	26.5

JULY 31, 1964 13 HR 25 MIN 9 SEC 535 MS

TAB NO 143

ATLAS PHOTO NO 143

POD SEQUENCE NO 932

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				39.265	91.75272	-10.040	-21.882	1827.208	2.560	-64.997	114.987			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.809	-20.217	107.60386	-58.0	10.5	-80.9	32.0	2.16112	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.674	-20.406	104.13506	-59.4	9.7	-79.8	31.8	2.08806	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.653	-20.082	108.67529	-63.3	10.8	-79.4	31.1	2.17854	0.837	-84.9	68.1	36.1	33.4	31.5
5	-10.954	-20.014	111.72163	-56.9	11.2	-82.0	32.1	2.24018	0.812	-91.0	68.2	36.0	35.8	30.9
6	-10.964	-20.350	106.91977	-52.6	10.1	-82.3	32.8	2.14335	0.851	-90.9	67.9	40.6	31.8	25.9
7	-10.674	-20.406	104.13506	-59.4	9.7	-79.8	31.8	2.08806	0.876	-85.4	67.8	40.7	29.0	26.5

JULY 31, 1964 13 HR 25 MIN 10 SEC 375 MS

TAB NO 144

ATLAS PHOTO NO 144

POD SEQUENCE NO 933

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ			
				38.425	89.80347	-10.052	-21.856	1825.259	2.561	-64.980	114.982			
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.806	-20.225	105.33089	-58.0	10.5	-80.9	32.0	2.11547	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.674	-20.409	101.93598	-59.4	9.7	-79.8	31.8	2.04396	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.652	-20.092	106.37907	-63.3	10.8	-79.4	31.1	2.13251	0.837	-84.9	68.1	36.1	33.3	31.5
5	-10.948	-20.026	109.36017	-56.9	11.2	-82.0	32.1	2.19283	0.812	-91.0	68.2	36.0	35.8	30.8
6	-10.957	-20.355	104.66129	-52.6	10.1	-82.3	32.8	2.09808	0.851	-90.9	67.9	40.6	31.8	25.9
7	-10.674	-20.409	101.93598	-59.4	9.7	-79.8	31.8	2.04396	0.876	-85.4	67.8	40.7	29.0	26.5

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TAB NO 145 ATLAS PHOTO NO 145 POD SEQUENCE NO 934

JULY 31, 1964 13 HR 25 MIN 11 SEC 215 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				37.585		87.85274	-10.064	-21.829	1823.309	2.562	-64.963	114.977		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.802	-20.232	103.05684	-58.0	10.5	-80.8	32.0	2.06980	0.844	-88.1	68.0	38.3	32.4	28.8
3	-10.673	-20.412	99.73584	-59.4	9.7	-79.8	31.8	1.99985	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.652	-20.102	104.08181	-63.3	10.8	-79.4	31.1	2.08646	0.837	-84.9	68.1	36.1	33.3	31.4
5	-10.941	-20.038	106.99765	-56.9	11.2	-82.0	32.1	2.14546	0.812	-91.0	68.2	36.0	35.8	30.8
6	-10.950	-20.360	102.40176	-52.6	10.1	-82.3	32.8	2.05278	0.851	-90.9	67.8	40.6	31.8	25.9
7	-10.673	-20.412	99.73584	-59.4	9.7	-79.8	31.8	1.99985	0.876	-85.4	67.8	40.7	29.0	26.5

TAB NO 146 ATLAS PHOTO NO 146 POD SEQUENCE NO 935

JULY 31, 1964 13 HR 25 MIN 12 SEC 55 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				36.745		85.90334	-10.076	-21.803	1821.359	2.564	-64.946	114.972		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.799	-20.240	100.78142	-58.0	10.4	-80.8	32.0	2.02410	0.844	-88.1	67.9	38.3	32.4	28.8
3	-10.672	-20.416	97.53434	-59.4	9.7	-79.8	31.8	1.95570	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.652	-20.113	101.78317	-63.3	10.8	-79.4	31.2	2.04038	0.837	-84.9	68.1	36.1	33.3	31.4
5	-10.934	-20.050	104.63378	-56.9	11.2	-82.0	32.1	2.09806	0.812	-91.0	68.1	36.0	35.8	30.8
6	-10.943	-20.364	102.14084	-52.6	10.1	-82.3	32.8	2.00746	0.852	-90.9	67.8	40.6	31.8	25.9
7	-10.672	-20.416	97.53434	-59.4	9.7	-79.8	31.8	1.95570	0.876	-85.4	67.8	40.7	29.0	26.5

TAB NO 147 ATLAS PHOTO NO 147 POD SEQUENCE NO 936

JULY 31, 1964 13 HR 25 MIN 12 SEC 895 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				35.905		83.95226	-10.088	-21.776	1819.408	2.565	-64.929	114.967		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.795	-20.247	98.50466	-58.0	10.4	-80.8	32.0	1.97837	0.845	-88.1	67.9	38.3	32.4	28.8
3	-10.671	-20.419	95.33153	-59.4	9.7	-79.8	31.8	1.91153	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.652	-20.123	99.48322	-63.2	10.8	-79.4	31.2	1.99428	0.837	-84.9	68.0	36.1	33.3	31.4
5	-10.928	-20.062	102.26857	-56.9	11.2	-82.0	32.1	2.05063	0.813	-91.0	68.1	36.0	35.8	30.8
6	-10.936	-20.369	97.87862	-52.6	10.1	-82.3	32.8	1.96211	0.852	-90.9	67.8	40.6	31.8	25.9
7	-10.671	-20.419	95.33153	-59.4	9.7	-79.8	31.8	1.91153	0.876	-85.4	67.8	40.7	29.0	26.5

TAB NO 148 ATLAS PHOTO NO 148 POD SEQUENCE NO 937

JULY 31, 1964 13 HR 25 MIN 13 SEC 735 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				35.065		82.00070	-10.101	-21.750	1817.456	2.566	-64.912	114.962		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.791	-20.255	96.22680	-58.0	10.4	-80.8	32.0	1.93262	0.845	-88.1	67.9	38.3	32.4	28.8
3	-10.671	-20.423	93.12760	-59.4	9.7	-79.8	31.8	1.86734	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.651	-20.133	97.18216	-63.2	10.8	-79.4	31.2	1.94815	0.837	-84.9	68.0	36.1	33.3	31.4
5	-10.921	-20.073	99.90228	-56.9	11.2	-82.0	32.1	2.00318	0.813	-91.0	68.1	36.0	35.8	30.8
6	-10.929	-20.374	95.61526	-52.6	10.1	-82.3	32.7	1.91674	0.852	-90.9	67.8	40.6	31.8	25.9
7	-10.671	-20.423	93.12760	-59.4	9.7	-79.8	31.8	1.86734	0.876	-85.4	67.8	40.7	29.0	26.5

TAB NO 149 ATLAS PHOTO NO 149 POD SEQUENCE NO 938

JULY 31, 1964 13 HR 25 MIN 14 SEC 574 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				34.225		80.04665	-10.113	-21.723	1815.504	2.567	-64.894	114.957		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.788	-20.262	93.94745	-58.0	10.4	-80.8	32.0	1.88685	0.845	-88.1	67.9	38.3	32.4	28.8
3	-10.670	-20.427	90.92227	-59.4	9.7	-79.8	31.8	1.82312	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.651	-20.144	94.87961	-63.2	10.8	-79.4	31.2	1.90199	0.837	-84.9	68.0	36.1	33.3	31.4
5	-10.914	-20.085	97.53448	-56.9	11.2	-82.0	32.1	1.95571	0.813	-91.0	68.1	36.0	35.8	30.8
6	-10.922	-20.379	93.35049	-52.6	10.1	-82.3	32.7	1.87134	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.670	-20.427	90.92227	-59.4	9.7	-79.8	31.8	1.82312	0.876	-85.4	67.8	40.7	29.0	26.5

TAB NO 150 ATLAS PHOTO NO 150 POD SEQUENCE NO 939

JULY 31, 1964 13 HR 25 MIN 15 SEC 414 MS

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ		
				33.385		78.09581	-10.125	-21.697	1813.551	2.568	-64.877	114.952		
PHOTO DATA														
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT
2	-10.784	-20.270	91.66663	-58.0	10.4	-80.8	32.0	1.84104	0.845	-88.1	67.9	38.3	32.4	28.7
3	-10.669	-20.430	88.71548	-59.4	9.7	-79.8	31.8	1.77887	0.876	-85.4	67.8	40.7	29.0	26.5
4	-10.651	-20.154	92.57559	-63.2	10.8	-79.4	31.2	1.85560	0.837	-84.9	68.0	36.1	33.3	31.4
5	-10.907	-20.097	95.16519	-56.9	11.2	-82.0	32.1	1.90820	0.813	-91.0	68.1	36.0	35.7	30.8
6	-10.915	-20.383	91.08426	-52.6	10.1	-82.3	32.7	1.82591	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.669	-20.430	88.71548	-59.4	9.7	-79.8	31.8	1.77887	0.876	-85.4	67.8	40.7	29.0	26.5

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TAB NO 151 ATLAS PHOTO NO 151 POD SEQUENCE NO 940														
JULY 31,1964 13 HR 25 MIN 16 SEC 254 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ	
PHOTO DATA					32.545		76.14272	-10.137	-21.670	1811.598	2.569	-64.860	114.947	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-10.780	-20.277	89.38495	-58.0	10.4	-80.8	32.0	1.79521	0.845	-88.1	67.9	38.3	32.4	28.7
3	-10.668	-20.434	86.50784	-59.4	9.7	-79.8	31.8	1.73461	0.876	-85.4	67.7	40.7	29.0	26.5
4	-10.650	-20.165	90.27074	-63.2	10.8	-79.4	31.2	1.80960	0.837	-84.9	68.0	36.1	33.3	31.4
5	-10.901	-20.109	92.79510	-56.9	11.2	-82.0	32.1	1.86067	0.813	-91.0	68.1	36.0	35.7	30.8
6	-10.908	-20.388	88.81715	-52.6	10.1	-82.3	32.7	1.78046	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.668	-20.434	86.50784	-59.4	9.7	-79.8	31.8	1.73461	0.876	-85.4	67.7	40.7	29.0	26.5
TAB NO 152 ATLAS PHOTO NO 152 POD SEQUENCE NO 941														
JULY 31,1964 13 HR 25 MIN 17 SEC 94 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ	
PHOTO DATA					31.705		74.18866	-10.149	-21.643	1809.644	2.570	-64.843	114.942	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-10.777	-20.285	87.10163	-58.0	10.4	-80.8	32.0	1.74935	0.845	-88.1	67.9	38.3	32.3	28.7
3	-10.667	-20.437	84.29857	-59.4	9.7	-79.8	31.8	1.69031	0.876	-85.4	67.7	40.7	29.0	26.5
4	-10.650	-20.175	87.96624	-63.2	10.8	-79.3	31.2	1.76336	0.837	-84.9	68.0	36.1	33.2	31.4
5	-10.894	-20.121	90.42335	-56.9	11.2	-82.0	32.1	1.81312	0.813	-91.0	68.1	36.0	35.7	30.7
6	-10.901	-20.393	86.54841	-52.6	10.0	-82.3	32.7	1.73498	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.667	-20.437	84.29857	-59.4	9.7	-79.8	31.8	1.69031	0.876	-85.4	67.7	40.7	29.0	26.5
TAB NO 153 ATLAS PHOTO NO 153 POD SEQUENCE NO 942														
JULY 31,1964 13 HR 25 MIN 17 SEC 934 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ	
PHOTO DATA					30.865		72.23428	-10.162	-21.617	1807.690	2.572	-64.825	114.937	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-10.773	-20.293	84.81738	-58.0	10.4	-80.8	32.0	1.70348	0.845	-88.1	67.9	38.3	32.3	28.7
3	-10.667	-20.441	82.08839	-59.4	9.7	-79.8	31.8	1.64599	0.876	-85.4	67.7	40.7	29.0	26.5
4	-10.649	-20.186	85.65686	-63.2	10.8	-79.3	31.2	1.71711	0.837	-84.9	68.0	36.1	33.3	31.4
5	-10.887	-20.133	88.05072	-56.9	11.2	-82.0	32.1	1.76554	0.813	-91.0	68.1	36.0	35.7	30.7
6	-10.894	-20.398	84.27876	-52.6	10.0	-82.3	32.7	1.68949	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.667	-20.441	82.08839	-59.4	9.7	-79.8	31.8	1.64599	0.876	-85.4	67.7	40.7	29.0	26.5
TAB NO 154 ATLAS PHOTO NO 154 POD SEQUENCE NO 943														
JULY 31,1964 13 HR 25 MIN 18 SEC 774 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ	
PHOTO DATA					30.025		70.27919	-10.174	-21.590	1805.734	2.573	-64.808	114.932	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-10.769	-20.300	82.53175	-58.0	10.4	-80.8	32.0	1.65757	0.845	-88.1	67.9	38.3	32.3	28.7
3	-10.666	-20.445	79.87683	-59.4	9.7	-79.8	31.8	1.60165	0.876	-85.4	67.7	40.7	29.0	26.5
4	-10.649	-20.196	83.34808	-63.2	10.8	-79.3	31.2	1.67083	0.838	-84.9	68.0	36.1	33.3	31.4
5	-10.880	-20.145	85.67670	-56.9	11.2	-82.0	32.1	1.71794	0.814	-91.0	68.1	36.0	35.7	30.7
6	-10.887	-20.463	82.00771	-52.6	10.0	-82.3	32.7	1.64396	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.666	-20.445	79.87683	-59.4	9.7	-79.8	31.8	1.60165	0.876	-85.4	67.7	40.7	29.0	26.5
TAB NO 155 ATLAS PHOTO NO 155 POD SEQUENCE NO 944														
JULY 31,1964 13 HR 25 MIN 19 SEC 614 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ	
PHOTO DATA					29.185		68.32353	-10.186	-21.563	1803.779	2.574	-64.790	114.927	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-10.766	-20.308	80.24490	-58.0	10.4	-80.8	32.0	1.61164	0.845	-88.1	67.9	38.3	32.3	28.7
3	-10.665	-20.448	77.66408	-59.4	9.7	-79.8	31.8	1.55728	0.876	-85.4	67.7	40.7	29.0	26.5
4	-10.649	-20.207	81.03811	-63.2	10.8	-79.3	31.2	1.62452	0.838	-84.9	68.0	36.1	33.2	31.3
5	-10.874	-20.157	83.30151	-56.9	11.1	-82.0	32.1	1.67031	0.814	-91.0	68.0	36.0	35.7	30.7
6	-10.881	-20.407	79.73545	-52.6	10.0	-82.3	32.7	1.59841	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.665	-20.448	77.66408	-59.4	9.7	-79.8	31.8	1.55728	0.876	-85.4	67.7	40.7	29.0	26.5
TAB NO 156 ATLAS PHOTO NO 156 POD SEQUENCE NO 945														
JULY 31,1964 13 HR 25 MIN 20 SEC 454 MS														
TRAJECTORY DATA					SEC TO IMPACT		ALT	LAT	LON	R	V	PTH	AZ	
PHOTO DATA					28.345		66.36710	-10.199	-21.536	1801.822	2.575	-64.773	114.922	
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA
2	-10.762	-20.316	77.95661	-58.0	10.4	-80.8	32.0	1.56568	0.845	-88.1	67.9	38.3	32.3	28.7
3	-10.664	-20.452	75.44991	-59.4	9.7	-79.8	31.8	1.51288	0.876	-85.4	67.7	40.7	29.0	26.5
4	-10.648	-20.218	78.72673	-63.2	10.8	-79.3	31.3	1.57819	0.838	-84.9	68.0	36.1	33.2	31.3
5	-10.867	-20.169	80.92488	-56.9	11.1	-82.0	32.1	1.62266	0.814	-91.0	68.0	36.0	35.7	30.7
6	-10.874	-20.412	77.46178	-52.6	10.0	-82.3	32.7	1.55283	0.852	-90.9	67.8	40.6	31.7	25.9
7	-10.664	-20.452	75.44991	-59.4	9.7	-79.8	31.8	1.51288	0.876	-85.4	67.7	40.7	29.0	26.5

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JULY 31, 1964 13 HR 25 MIN 21 SEC 294 MS

TAB NO 157

ATLAS PHOTO NO 157

POD SEQUENCE NO 946

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				27.505				64.41035		-10.211		-21.509		1799.866		2.576		-64.755		114.917	
PHOTO DATA								A*		B/A		AZPHAZ		INCD PHAZ		EMIS ALPHA		SCALE		PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA														
2	-10.758	-20.324	75.66739	-58.0	10.4	-80.8	32.0	1.51971	0.845	-88.1	67.9	38.3	32.3	28.7	0.						
3	-10.663	-20.456	73.23480	-59.4	9.7	-79.8	31.8	1.46846	0.876	-85.4	67.7	40.7	29.0	26.5	4.87408	2	3				
4	-10.648	-20.228	76.41442	-63.2	10.8	-79.3	31.3	1.53183	0.838	-84.9	67.9	36.1	33.2	31.3	6.79051	3	4				
5	-10.860	-20.181	78.54736	-56.9	11.1	-82.0	32.1	1.57499	0.814	-91.0	68.0	36.0	35.6	30.7	6.56979	4	5				
6	-10.867	-20.417	75.18716	-52.7	10.0	-82.3	32.7	1.50723	0.852	-90.9	67.8	40.6	31.7	25.9	7.02022	5	6				
7	-10.663	-20.456	73.23480	-59.4	9.7	-79.8	31.8	1.46846	0.876	-85.4	67.7	40.7	29.0	26.5	6.26381	6	7				

JULY 31, 1964 13 HR 25 MIN 22 SEC 134 MS

TAB NO 158

ATLAS PHOTO NO 158

POD SEQUENCE NO 947

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				26.665				62.45282		-10.223		-21.482		1797.908		2.577		-64.738		114.912	
PHOTO DATA								A*		B/A		AZPHAZ		INCD PHAZ		EMIS ALPHA		SCALE		PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA														
2	-10.754	-20.311	73.37673	-58.0	10.4	-80.8	32.0	1.47370	0.845	-88.1	67.9	38.3	32.3	28.7	0.						
3	-10.662	-20.460	71.01826	-59.4	9.7	-79.8	31.8	1.42462	0.876	-85.4	67.7	40.7	29.0	26.5	4.72628	2	3				
4	-10.644	-20.239	74.10068	-63.2	10.8	-79.3	31.3	1.40545	0.838	-84.9	67.9	36.1	33.2	31.3	6.58451	3	4				
5	-10.853	-20.193	76.16839	-56.9	11.1	-82.0	32.1	1.52729	0.814	-91.0	68.0	36.0	35.6	30.7	6.37068	4	5				
6	-10.859	-20.422	72.91109	-52.7	10.0	-82.3	32.7	1.46161	0.852	-90.9	67.8	40.6	31.7	25.9	6.80710	5	6				
7	-10.662	-20.460	71.01826	-59.4	9.7	-79.8	31.8	1.42462	0.876	-85.4	67.7	40.7	29.0	26.5	6.07396	6	7				

JULY 31, 1964 13 HR 25 MIN 22 SEC 974 MS

TAB NO 159

ATLAS PHOTO NO 159

POD SEQUENCE NO 948

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				25.825				60.45503		-10.236		-21.454		1795.950		2.578		-64.720		114.907	
PHOTO DATA								A*		B/A		AZPHAZ		INCD PHAZ		EMIS ALPHA		SCALE		PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA														
2	-10.751	-20.339	71.08518	-58.0	10.4	-80.8	32.0	1.42768	0.845	-88.1	67.8	38.3	32.3	28.7	0.						
3	-10.661	-20.463	68.80083	-59.4	9.7	-79.8	31.8	1.37956	0.876	-85.4	67.7	40.7	29.0	26.5	4.57845	2	3				
4	-10.647	-20.250	71.78608	-63.2	10.8	-79.3	31.3	1.43905	0.838	-84.9	67.9	36.1	33.2	31.3	6.37845	3	4				
5	-10.846	-20.205	73.78856	-56.9	11.1	-82.0	32.1	1.47957	0.814	-91.0	68.0	36.0	35.6	30.7	6.17146	4	5				
6	-10.852	-20.427	70.63415	-52.7	10.0	-82.3	32.7	1.41556	0.852	-90.9	67.8	40.6	31.7	25.9	6.59393	5	6				
7	-10.661	-20.463	68.80083	-59.4	9.7	-79.8	31.8	1.37956	0.876	-85.4	67.7	40.7	29.0	26.5	5.88419	6	7				

JULY 31, 1964 13 HR 25 MIN 23 SEC 814 MS

TAB NO 160

ATLAS PHOTO NO 160

POD SEQUENCE NO 949

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				24.985				58.53633		-10.248		-21.427		1793.992		2.580		-64.702		114.902	
PHOTO DATA								A*		B/A		AZPHAZ		INCD PHAZ		EMIS ALPHA		SCALE		PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA														
2	-10.747	-20.347	68.79204	-58.0	10.4	-80.8	32.0	1.38162	0.845	-88.1	67.8	38.3	32.3	28.7	0.						
3	-10.661	-20.467	66.58185	-59.4	9.7	-79.8	31.8	1.33506	0.876	-85.4	67.7	40.7	29.0	26.5	4.43051	2	3				
4	-10.647	-20.260	69.46991	-63.2	10.8	-79.3	31.3	1.39262	0.838	-84.9	67.9	36.1	33.2	31.3	6.17227	3	4				
5	-10.839	-20.218	71.40718	-56.9	11.1	-82.0	32.1	1.43182	0.814	-91.0	68.0	36.0	35.6	30.7	5.97204	4	5				
6	-10.845	-20.432	68.35563	-52.7	10.0	-82.3	32.7	1.37029	0.852	-90.9	67.8	40.6	31.7	25.9	6.38065	5	6				
7	-10.661	-20.467	66.58185	-59.4	9.7	-79.8	31.8	1.33506	0.876	-85.4	67.7	40.7	29.0	26.5	5.69423	6	7				

JULY 31, 1964 13 HR 25 MIN 24 SEC 654 MS

TAB NO 161

ATLAS PHOTO NO 161

POD SEQUENCE NO 950

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				24.146				56.57715		-10.261		-21.400		1792.032		2.581		-64.685		114.897	
PHOTO DATA								A*		B/A		AZPHAZ		INCD PHAZ		EMIS ALPHA		SCALE		PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA														
2	-10.743	-20.355	66.49776	-58.0	10.4	-80.8	32.0	1.33554	0.846	-88.1	67.8	38.3	32.3	28.7	0.						
3	-10.660	-20.471	64.36174	-59.4	9.7	-79.8	31.8	1.29055	0.876	-85.4	67.7	40.7	29.0	26.4	4.28259	2	3				
4	-10.646	-20.271	67.15261	-63.1	10.8	-79.3	31.3	1.34617	0.838	-84.9	67.9	36.1	33.2	31.3	5.96602	3	4				
5	-10.833	-20.230	69.02467	-56.9	11.1	-82.0	32.1	1.38404	0.814	-91.0	68.0	36.0	35.6	30.6	5.77262	4	5				
6	-10.838	-20.437	66.07599	-52.7	10.0	-82.3	32.7	1.32459	0.853	-90.9	67.8	40.6	31.7	25.8	6.16729	5	6				
7	-10.660	-20.471	64.36174	-59.4	9.7	-79.8	31.8	1.29055	0.876	-85.4	67.7	40.7	29.0	26.4	5.50436	6	7				

JULY 31, 1964 13 HR 25 MIN 25 SEC 494 MS

TAB NO 162

ATLAS PHOTO NO 162

POD SEQUENCE NO 951

TRAJECTORY DATA				SEC TO IMPACT				ALT		LAT		LCN		R		V		PTH		AZ	
				23.306				54.61717		-10.273		-21.373		1790.072		2.582		-64.667		114.892	
PHOTO DATA								A*		B/A		AZPHAZ		INCD PHAZ		EMIS ALPHA		SCALE		PT-PT	
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA														
2	-10.739	-20.363	64.20202	-58.0	10.4	-80.8	32.0	1.28944	0.846	-88.1	67.8	38.3	32.3	28.7	0.						
3	-10.659	-20.475	62.14017	-59.3	9.7	-79.8	31.8	1.24600	0.876	-85.4	67.7	40.7	29.0	26.4	4.13449	2	3				
4	-10.646	-20.282	64.83386	-63.1	10.8	-79.3	31.3	1.29969	0.838	-84.9	67.9	36.1	33.2	31.3	5.75966	3	4				
5	-10.826	-20.242	66.64070	-56.9	11.1	-82.0	32.1	1.33624	0.815	-91.0	68.0	36.0	35.6	30.6	5.57310	4	5				
6	-10.831	-20.442	63.79485	-52.7	10.0	-82.3	32.7	1.27886	0.853	-90.9	67.8	40.6	31.7	25.8	5.95385	5	6				
7	-10.659	-20.475	62.14017	-59.3	9.7	-79.8	31.8	1.24600	0.876	-85.4	67.7	40.7	29.0	26.4	5.31409	6	7				

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JULY 31, 1964 13 HR 25 MIN 26 SEC 334 MS

TAB NO 163

ATLAS PHOTO NO 163

POD SEQUENCE NO 952

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				22.466		52.65695	-10.286	-21.345	1788.112	2.583	-64.649	114.887				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-10.736	-20.370	61.90542	-58.0	10.4	-80.8	32.0	1.24331	0.846	-88.1	67.8	38.3	32.3	28.6	0.	1-2
3	-10.658	-20.479	59.91775	-59.3	9.7	-79.8	31.8	1.20144	0.876	-85.4	67.7	40.7	29.0	26.4	3.98638	2-3
4	-10.645	-20.292	62.51427	-63.1	10.8	-79.3	31.3	1.25319	0.838	-84.9	67.9	36.1	33.2	31.3	5.55326	3-4
5	-10.819	-20.254	64.25591	-56.9	11.1	-82.0	32.1	1.28842	0.815	-91.0	67.9	36.0	35.6	30.6	5.37339	4-5
6	-10.824	-20.447	61.51289	-52.7	10.0	-82.3	32.7	1.23311	0.853	-90.9	67.8	40.6	31.6	25.8	5.174036	5-6
7	-10.658	-20.479	59.91775	-59.3	9.7	-79.8	31.8	1.20144	0.876	-85.4	67.7	40.7	29.0	26.4	5.12392	6-7

JULY 31, 1964 13 HR 25 MIN 27 SEC 174 MS

TAB NO 164

ATLAS PHOTO NO 164

POD SEQUENCE NO 953

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				21.626		50.69588	-10.298	-21.318	1786.151	2.584	-64.632	114.881				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-10.732	-20.378	59.60727	-58.0	10.4	-80.8	32.0	1.19716	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.657	-20.482	57.69378	-59.3	9.7	-79.8	31.8	1.15664	0.876	-85.4	67.7	40.7	29.0	26.4	3.83821	2-3
4	-10.645	-20.303	60.19314	-63.1	10.8	-79.3	31.3	1.20666	0.839	-84.9	67.9	36.1	33.2	31.2	5.34674	3-4
5	-10.812	-20.266	61.86959	-56.9	11.1	-82.0	32.1	1.24057	0.815	-91.0	67.9	36.0	35.6	30.6	5.17377	4-5
6	-10.817	-20.452	59.22936	-52.7	10.0	-82.3	32.6	1.18734	0.853	-90.9	67.7	40.6	31.6	25.8	5.52675	5-6
7	-10.657	-20.482	57.69378	-59.3	9.7	-79.8	31.8	1.15664	0.876	-85.4	67.7	40.7	29.0	26.4	4.93365	6-7

JULY 31, 1964 13 HR 25 MIN 28 SEC 14 MS

TAB NO 165

ATLAS PHOTO NO 165

POD SEQUENCE NO 954

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				20.766		48.73438	-10.311	-21.290	1784.190	2.585	-64.614	114.876				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-10.728	-20.366	57.30804	-58.0	10.4	-80.8	32.0	1.15058	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.656	-20.486	55.46876	-59.3	9.7	-79.7	31.8	1.11223	0.876	-85.4	67.7	40.7	29.0	26.4	3.68995	2-3
4	-10.644	-20.314	57.87096	-63.1	10.8	-79.3	31.3	1.16010	0.839	-84.9	67.9	36.1	33.1	31.2	5.14015	3-4
5	-10.805	-20.279	59.48222	-56.9	11.1	-82.0	32.1	1.19270	0.815	-91.0	67.9	36.0	35.5	30.6	4.97395	4-5
6	-10.810	-20.457	56.94477	-52.7	10.0	-82.3	32.6	1.14154	0.853	-90.9	67.7	40.6	31.6	25.8	5.31310	5-6
7	-10.656	-20.486	55.46876	-59.3	9.7	-79.7	31.8	1.11223	0.876	-85.4	67.7	40.7	29.0	26.4	4.74327	6-7

JULY 31, 1964 13 HR 25 MIN 28 SEC 854 MS

TAB NO 166

ATLAS PHOTO NO 166

POD SEQUENCE NO 955

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				19.946		46.77220	-10.323	-21.263	1782.227	2.587	-64.596	114.871				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-10.724	-20.394	55.00749	-58.0	10.4	-80.8	32.0	1.10477	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.655	-20.490	53.24240	-59.3	9.7	-79.7	31.8	1.06759	0.876	-85.4	67.7	40.7	29.0	26.4	3.54171	2-3
4	-10.644	-20.325	55.54744	-63.1	10.8	-79.3	31.3	1.11353	0.839	-84.9	67.9	36.1	33.1	31.2	4.93347	3-4
5	-10.798	-20.291	57.09352	-56.9	11.1	-82.0	32.1	1.14481	0.815	-91.0	67.9	36.0	35.5	30.6	4.77414	4-5
6	-10.803	-20.462	54.65884	-52.7	10.0	-82.3	32.6	1.09571	0.853	-90.9	67.7	40.6	31.6	25.8	5.09934	5-6
7	-10.655	-20.490	53.24240	-59.3	9.7	-79.7	31.8	1.06759	0.876	-85.4	67.7	40.7	29.0	26.4	4.55279	6-7

JULY 31, 1964 13 HR 25 MIN 29 SEC 694 MS

TAB NO 167

ATLAS PHOTO NO 167

POD SEQUENCE NO 956

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				19.106		44.80942	-10.336	-21.235	1780.265	2.588	-64.578	114.866				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-10.720	-20.402	52.70572	-58.0	10.4	-80.8	32.0	1.05854	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.654	-20.494	51.01485	-59.3	9.8	-79.7	31.8	1.02292	0.876	-85.4	67.7	40.7	29.0	26.4	3.39329	2-3
4	-10.644	-20.336	53.22270	-63.1	10.8	-79.3	31.4	1.06692	0.839	-84.9	67.8	36.1	33.1	31.2	4.72670	3-4
5	-10.791	-20.303	54.70371	-56.9	11.1	-82.0	32.1	1.09669	0.815	-91.0	67.9	36.0	35.5	30.6	4.57423	4-5
6	-10.796	-20.467	52.37180	-52.7	10.0	-82.3	32.6	1.04987	0.853	-90.9	67.7	40.6	31.6	25.8	4.88552	5-6
7	-10.654	-20.494	51.01485	-59.3	9.8	-79.7	31.8	1.02292	0.876	-85.4	67.7	40.7	29.0	26.4	4.36221	6-7

JULY 31, 1964 13 HR 25 MIN 30 SEC 534 MS

TAB NO 168

ATLAS PHOTO NO 168

POD SEQUENCE NO 957

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				18.266		42.84596	-10.349	-21.207	1778.301	2.589	-64.560	114.861				
PHOTO DATA						A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT		
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA									
2	-10.716	-20.410	50.40260	-58.0	10.4	-80.8	32.0	1.01229	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.653	-20.498	48.78593	-59.3	9.8	-79.7	31.9	0.97823	0.876	-85.4	67.7	40.7	29.0	26.4	3.24485	2-3
4	-10.643	-20.347	50.89659	-63.1	10.8	-79.3	31.4	1.02029	0.839	-84.9	67.8	36.1	33.1	31.2	4.51982	3-4
5	-10.784	-20.315	52.31252	-56.9	11.1	-82.0	32.1	1.04894	0.815	-91.0	67.9	36.0	35.5	30.6	4.37423	4-5
6	-10.789	-20.472	50.08337	-52.7	10.0	-82.3	32.6	1.00359	0.853	-90.9	67.7	40.6	31.6	25.8	4.67160	5-6
7	-10.653	-20.498	48.78593	-59.3	9.8	-79.7	31.9	0.97823	0.876	-85.4	67.7	40.7	29.0	26.4	4.17153	6-7

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JULY 31, 1964 13 HR 25 MIN 31 SEC 374 MS TAB NO 169 ATLAS PHOTO NO 169 POD SEQUENCE NO 958

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				17.426		40.88190	-10.361	-21.179	1776.337	2.590	-64.542	114.855				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.713	-20.418	48.09819	-58.0	10.4	-80.8	32.0	C.96601	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.652	-20.502	46.55574	-59.3	9.8	-79.7	31.9	C.93351	0.876	-85.4	67.7	40.7	28.9	26.4	3.09640	2-3
4	-10.643	-20.357	48.56924	-63.1	10.8	-79.3	31.4	C.97364	0.839	-84.9	67.8	36.1	33.1	31.2	4.31284	3-4
5	-10.777	-20.328	49.92005	-56.9	11.1	-81.9	32.1	1.00097	0.816	-91.0	67.9	36.0	35.5	30.5	4.17402	4-5
6	-10.782	-20.477	47.79365	-52.7	10.0	-82.3	32.6	C.95809	0.853	-90.9	67.7	40.6	31.6	25.8	4.45759	5-6
7	-10.652	-20.502	46.55574	-59.3	9.8	-79.7	31.9	C.93351	0.876	-85.4	67.7	40.7	28.9	26.4	3.98074	6-7

JULY 31, 1964 13 HR 25 MIN 32 SEC 213 MS TAB NO 170 ATLAS PHOTO NO 170 POD SEQUENCE NO 959

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				16.586		38.91740	-10.374	-21.152	1774.373	2.591	-64.524	114.850				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.709	-20.426	45.79270	-58.0	10.4	-80.8	32.0	C.91970	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.651	-20.506	44.32448	-59.3	9.8	-79.7	31.9	C.88877	0.876	-85.4	67.7	40.7	28.9	26.4	2.94783	2-3
4	-10.642	-20.368	46.24063	-63.1	10.8	-79.3	31.4	C.92696	0.839	-84.9	67.8	36.1	33.1	31.2	4.10582	3-4
5	-10.770	-20.340	47.52655	-56.9	11.1	-81.9	32.1	C.95298	0.816	-91.0	67.9	36.0	35.5	30.5	3.97381	4-5
6	-10.774	-20.483	45.50286	-52.7	10.0	-82.3	32.6	C.91217	0.853	-90.9	67.7	40.6	31.6	25.8	4.24353	5-6
7	-10.651	-20.506	44.32448	-59.3	9.8	-79.7	31.9	C.88877	0.876	-85.4	67.7	40.7	28.9	26.4	3.78986	6-7

JULY 31, 1964 13 HR 25 MIN 33 SEC 53 MS TAB NO 171 ATLAS PHOTO NO 171 POD SEQUENCE NO 960

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				15.746		36.95218	-10.387	-21.124	1772.407	2.592	-64.506	114.845				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.705	-20.434	43.46579	-58.0	10.4	-80.8	32.0	C.87337	0.846	-88.1	67.8	38.3	32.2	28.6	0.	1-2
3	-10.650	-20.510	42.09182	-59.3	9.8	-79.7	31.9	C.84400	0.877	-85.4	67.7	40.7	28.9	26.4	2.79919	2-3
4	-10.642	-20.379	43.91101	-63.1	10.8	-79.3	31.4	C.88026	0.839	-84.9	67.8	36.1	33.1	31.2	3.69869	3-4
5	-10.763	-20.352	45.13164	-56.9	11.1	-81.9	32.1	C.90495	0.816	-91.0	67.8	36.0	35.5	30.5	3.77341	4-5
6	-10.767	-20.488	43.21067	-52.7	10.0	-82.3	32.6	C.86622	0.853	-90.9	67.7	40.6	31.6	25.8	4.02937	5-6
7	-10.650	-20.510	42.09182	-59.3	9.8	-79.7	31.9	C.84400	0.877	-85.4	67.7	40.7	28.9	26.4	3.59896	6-7

JULY 31, 1964 13 HR 25 MIN 33 SEC 893 MS TAB NO 172 ATLAS PHOTO NO 172 POD SEQUENCE NO 961

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				14.906		34.98640	-10.399	-21.096	1770.442	2.594	-64.488	114.839				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.701	-20.442	41.17765	-58.0	10.4	-80.8	32.0	C.82701	0.846	-88.1	67.7	38.3	32.2	28.6	0.	1-2
3	-10.649	-20.514	39.85794	-59.3	9.8	-79.7	31.9	C.79921	0.877	-85.4	67.7	40.7	28.9	26.4	2.65046	2-3
4	-10.641	-20.390	41.57999	-63.0	10.8	-79.3	31.4	C.83353	0.839	-84.9	67.8	36.1	33.1	31.2	3.69150	3-4
5	-10.756	-20.365	42.73551	-56.9	11.1	-81.9	32.2	C.85641	0.816	-91.0	67.8	36.0	35.5	30.5	3.57300	4-5
6	-10.760	-20.493	40.91722	-52.7	10.0	-82.3	32.6	C.82024	0.853	-90.9	67.7	40.6	31.6	25.8	3.81514	5-6
7	-10.649	-20.514	39.85794	-59.3	9.8	-79.7	31.9	C.79921	0.877	-85.4	67.7	40.7	28.9	26.4	3.40787	6-7

JULY 31, 1964 13 HR 25 MIN 34 SEC 733 MS TAB NO 173 ATLAS PHOTO NO 173 POD SEQUENCE NO 962

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				14.066		33.01996	-10.412	-21.068	1768.475	2.595	-64.470	114.834				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.697	-20.450	38.86814	-58.0	10.4	-80.8	32.0	C.78063	0.846	-88.1	67.7	38.3	32.2	28.6	0.	1-2
3	-10.644	-20.518	37.62270	-59.3	9.8	-79.7	31.9	C.75439	0.877	-85.4	67.7	40.7	28.9	26.4	2.50167	2-3
4	-10.641	-20.401	39.24763	-63.0	10.8	-79.3	31.4	C.78677	0.839	-84.9	67.8	36.1	33.1	31.1	3.48419	3-4
5	-10.749	-20.377	40.33804	-56.9	11.1	-81.9	32.2	C.80864	0.816	-91.0	67.8	36.0	35.4	30.5	3.37249	4-5
6	-10.753	-20.498	38.62239	-52.7	10.0	-82.3	32.6	C.77424	0.853	-90.9	67.7	40.6	31.6	25.8	3.60083	5-6
7	-10.644	-20.518	37.62270	-59.3	9.8	-79.7	31.9	C.75439	0.877	-85.4	67.7	40.7	28.9	26.4	3.21666	6-7

JULY 31, 1964 13 HR 25 MIN 35 SEC 573 MS TAB NO 174 ATLAS PHOTO NO 174 POD SEQUENCE NO 963

TRAJECTORY DATA				SEC TO IMPACT		ALT	LAT	LCN	R	V	PTH	AZ				
				13.226		31.05310	-10.425	-21.039	1766.508	2.596	-64.452	114.829				
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.693	-20.458	36.55757	-58.0	10.4	-80.8	32.0	C.73422	0.846	-88.1	67.7	38.3	32.2	28.6	0.	1-2
3	-10.647	-20.522	35.38640	-59.3	9.8	-79.7	31.9	C.70955	0.877	-85.4	67.7	40.7	28.9	26.4	2.35291	2-3
4	-10.640	-20.412	36.91621	-63.0	10.8	-79.3	31.4	C.74000	0.839	-84.9	67.8	36.1	33.1	31.1	3.27682	3-4
5	-10.742	-20.390	37.93953	-56.9	11.1	-81.9	32.2	C.76074	0.816	-91.0	67.8	36.0	35.4	30.5	3.17189	4-5
6	-10.746	-20.503	36.32652	-52.7	10.0	-82.3	32.6	C.72822	0.853	-90.9	67.7	40.6	31.6	25.8	3.38645	5-6
7	-10.647	-20.522	35.38640	-59.3	9.8	-79.7	31.9	C.70955	0.877	-85.4	67.7	40.7	28.9	26.4	3.02546	6-7

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JULY 31, 1964 13 HR 25 MIN 36 SEC 413 MS TAB NO 175 ATLAS PHOTO NO 175 POD SEQUENCE NO 964

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				12.366	29.08543	-10.438	-21.011	1764.541	2.597	-64.434	114.823					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.689	-20.466	34.24546	-58.0	10.4	-80.8	32.0	0.68779	0.847	-88.1	67.7	38.3	32.2	28.5	0.	1-2
3	-10.646	-20.526	33.14859	-59.3	9.8	-79.7	31.9	0.66468	0.877	-85.4	67.7	40.7	28.9	26.4	2.20399	2-3
4	-10.639	-20.423	34.57928	-63.0	10.8	-79.3	31.5	0.69319	0.840	-84.9	67.8	36.1	33.0	31.1	3.06935	3-4
5	-10.735	-20.402	35.53951	-56.9	11.1	-81.9	32.2	0.71262	0.816	-91.0	67.8	36.0	35.4	30.5	2.97117	4-5
6	-10.738	-20.509	34.02909	-52.7	10.0	-82.3	32.6	0.68216	0.853	-90.9	67.7	40.6	31.6	25.8	3.17199	5-6
7	-10.646	-20.526	33.14859	-59.3	9.8	-79.7	31.9	0.66468	0.877	-85.4	67.7	40.7	28.9	26.4	2.83405	6-7

JULY 31, 1964 13 HR 25 MIN 37 SEC 253 MS TAB NO 176 ATLAS PHOTO NO 176 POD SEQUENCE NO 965

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				11.546	27.11722	-10.451	-20.983	1762.573	2.598	-64.415	114.818					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.685	-20.474	31.93212	-58.0	10.4	-80.8	32.0	0.64133	0.847	-88.1	67.7	38.3	32.2	28.5	0.	1-2
3	-10.645	-20.530	30.90957	-59.3	9.8	-79.7	31.9	0.61978	0.877	-85.4	67.7	40.7	28.9	26.4	2.05494	2-3
4	-10.639	-20.434	32.24316	-63.0	10.8	-79.3	31.5	0.64636	0.840	-84.9	67.7	36.1	33.0	31.1	2.86179	3-4
5	-10.728	-20.415	33.13828	-56.9	11.1	-81.9	32.2	0.66447	0.816	-91.0	67.8	36.0	35.4	30.5	2.77037	4-5
6	-10.731	-20.514	31.73044	-52.7	10.0	-82.3	32.6	0.63608	0.853	-90.9	67.7	40.6	31.6	25.8	2.95743	5-6
7	-10.645	-20.530	30.90957	-59.3	9.8	-79.7	31.9	0.61978	0.877	-85.4	67.7	40.7	28.9	26.4	2.64254	6-7

JULY 31, 1964 13 HR 25 MIN 38 SEC 93 MS TAB NO 177 ATLAS PHOTO NO 177 POD SEQUENCE NO 966

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				10.706	25.14835	-10.464	-20.955	1760.604	2.600	-64.397	114.813					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.681	-20.482	29.61742	-58.0	10.4	-80.8	32.0	0.59484	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.644	-20.534	28.66919	-59.3	9.8	-79.7	31.9	0.57486	0.877	-85.4	67.6	40.7	28.9	26.4	1.90592	2-3
4	-10.638	-20.445	29.90569	-63.0	10.8	-79.3	31.5	0.59950	0.840	-84.9	67.7	36.1	33.0	31.1	2.65414	3-4
5	-10.721	-20.427	30.73570	-56.9	11.1	-81.9	32.2	0.61629	0.817	-91.0	67.8	36.0	35.4	30.4	2.56946	4-5
6	-10.724	-20.519	29.43043	-52.7	10.0	-82.3	32.6	0.58998	0.854	-90.9	67.7	40.6	31.5	25.8	2.74278	5-6
7	-10.644	-20.534	28.66919	-59.3	9.8	-79.7	31.9	0.57486	0.877	-85.4	67.6	40.7	28.9	26.4	2.45102	6-7

JULY 31, 1964 13 HR 25 MIN 38 SEC 933 MS TAB NO 178 ATLAS PHOTO NO 178 POD SEQUENCE NO 967

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				9.866	23.17897	-10.476	-20.926	1758.634	2.601	-64.379	114.807					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.677	-20.491	27.30156	-58.0	10.4	-80.8	32.0	0.54833	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.643	-20.538	26.42767	-59.3	9.8	-79.7	31.9	0.52991	0.877	-85.4	67.6	40.7	28.9	26.4	1.75680	2-3
4	-10.638	-20.456	27.56709	-63.0	10.8	-79.3	31.5	0.55242	0.840	-84.9	67.7	36.1	33.0	31.1	2.44843	3-4
5	-10.714	-20.440	28.33197	-56.9	11.1	-81.9	32.2	0.56810	0.817	-91.0	67.7	36.0	35.4	30.4	2.36835	4-5
6	-10.717	-20.524	27.12925	-52.7	10.0	-82.3	32.6	0.54385	0.854	-90.9	67.7	40.6	31.5	25.8	2.52809	5-6
7	-10.643	-20.538	26.42767	-59.3	9.8	-79.7	31.9	0.52991	0.877	-85.4	67.6	40.7	28.9	26.4	2.25930	6-7

JULY 31, 1964 13 HR 25 MIN 39 SEC 773 MS TAB NO 179 ATLAS PHOTO NO 179 POD SEQUENCE NO 968

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				9.026	21.20894	-10.489	-20.898	1756.664	2.602	-64.360	114.802					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.674	-20.499	24.98434	-58.0	10.4	-80.8	32.0	0.50179	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.642	-20.542	24.18477	-59.3	9.8	-79.7	31.9	0.48494	0.877	-85.4	67.6	40.7	28.9	26.4	1.60763	2-3
4	-10.637	-20.467	25.22712	-63.0	10.8	-79.3	31.5	0.50571	0.840	-84.9	67.7	36.1	33.0	31.1	2.23862	3-4
5	-10.707	-20.452	25.92691	-56.9	11.0	-81.9	32.2	0.51987	0.817	-91.0	67.7	36.0	35.4	30.4	2.16734	4-5
6	-10.709	-20.530	24.82670	-52.7	10.0	-82.3	32.6	0.49769	0.854	-90.9	67.7	40.6	31.5	25.8	2.31330	5-6
7	-10.642	-20.542	24.18477	-59.3	9.8	-79.7	31.9	0.48494	0.877	-85.4	67.6	40.7	28.9	26.4	2.06758	6-7

JULY 31, 1964 13 HR 25 MIN 40 SEC 613 MS TAB NO 180 ATLAS PHOTO NO 180 POD SEQUENCE NO 969

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ					
				8.186	19.23828	-10.502	-20.869	1754.694	2.603	-64.342	114.796					
PHOTO DATA																
PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS	ALPHA	SCALE	PT-PT	
2	-10.670	-20.507	22.66576	-58.0	10.4	-80.8	32.0	0.45522	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.641	-20.547	21.94055	-59.3	9.8	-79.7	31.9	0.43994	0.877	-85.4	67.6	40.7	28.9	26.4	1.45837	2-3
4	-10.637	-20.479	22.88585	-63.0	10.8	-79.3	31.5	0.45878	0.840	-84.9	67.7	36.1	33.0	31.1	2.03072	3-4
5	-10.700	-20.465	23.52051	-56.9	11.0	-81.9	32.2	0.47162	0.817	-91.0	67.7	36.0	35.3	30.4	1.96602	4-5
6	-10.702	-20.535	22.52281	-52.7	10.0	-82.3	32.6	0.45150	0.854	-90.9	67.7	40.6	31.5	25.7	2.09843	5-6
7	-10.641	-20.547	21.94055	-59.3	9.8	-79.7	31.9	0.43994	0.877	-85.4	67.6	40.7	28.9	26.4	1.87565	6-7

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JULY 31, 1964 13 HR 25 MIN 41 SEC 453 MS TAB NO 181 ATLAS PHOTO NO 181 POD SEQUENCE NO 970

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
7.347 17.26703 -10.515 -20.841 1752.722 2.604 -64.324 114.791

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.666	-20.515	20.34593	-58.0	10.4	-80.8	32.0	C.40863	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.640	-20.551	19.69508	-59.2	9.8	-79.7	31.9	C.39492	0.877	-85.4	67.6	40.7	28.9	26.4	1.30905	2-3
4	-10.636	-20.490	20.54333	-63.0	10.8	-79.3	31.5	C.41182	0.840	-84.9	67.7	36.1	33.0	31.1	1.82275	3-4
5	-10.693	-20.477	21.11269	-56.9	11.0	-81.9	32.2	C.42334	0.817	-91.0	67.7	36.0	35.3	30.4	1.76491	4-5
6	-10.695	-20.540	20.21765	-52.7	10.0	-82.3	32.6	C.40529	0.854	-90.9	67.6	40.6	31.5	25.7	1.88348	5-6
7	-10.640	-20.551	19.69508	-59.2	9.8	-79.7	31.9	C.39492	0.877	-85.4	67.6	40.7	28.9	26.4	1.68362	6-7

JULY 31, 1964 13 HR 25 MIN 42 SEC 293 MS TAB NO 182 ATLAS PHOTO NO 182 POD SEQUENCE NO 971

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
6.507 15.29521 -10.528 -20.812 1750.751 2.606 -64.305 114.785

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.662	-20.523	18.02484	-57.9	10.4	-80.8	32.1	C.36201	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.639	-20.555	17.44837	-59.2	9.8	-79.7	31.9	C.34986	0.877	-85.4	67.6	40.7	28.9	26.4	1.15958	2-3
4	-10.635	-20.501	18.19454	-63.0	10.8	-79.3	31.5	C.36484	0.840	-84.9	67.7	36.1	33.0	31.0	1.61469	3-4
5	-10.686	-20.490	18.70463	-56.9	11.0	-81.9	32.2	C.37504	0.817	-91.0	67.7	36.0	35.3	30.4	1.66349	4-5
6	-10.687	-20.546	17.91124	-52.7	10.0	-82.3	32.6	C.35906	0.854	-90.9	67.6	40.6	31.5	25.7	1.66844	5-6
7	-10.639	-20.555	17.44837	-59.2	9.8	-79.7	31.9	C.34986	0.877	-85.4	67.6	40.7	28.9	26.4	1.49149	6-7

JULY 31, 1964 13 HR 25 MIN 43 SEC 133 MS TAB NO 183 ATLAS PHOTO NO 183 POD SEQUENCE NO 972

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
5.667 13.32274 -10.541 -20.783 1748.778 2.607 -64.287 114.780

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.658	-20.523	15.70236	-57.9	10.4	-80.8	32.1	C.31537	0.847	-88.1	67.7	38.3	32.1	28.5	0.	1-2
3	-10.638	-20.559	15.20027	-59.2	9.8	-79.7	31.9	C.30479	0.877	-85.4	67.6	40.7	28.9	26.4	1.01018	2-3
4	-10.635	-20.512	15.85448	-62.9	10.8	-79.2	31.5	C.31783	0.840	-84.9	67.7	36.1	33.0	31.0	1.40654	3-4
5	-10.679	-20.502	16.29379	-56.9	11.0	-81.9	32.2	C.32671	0.817	-91.0	67.7	36.0	35.3	30.4	1.36198	4-5
6	-10.680	-20.551	15.60343	-52.7	10.0	-82.3	32.6	C.31279	0.854	-90.9	67.6	40.6	31.5	25.7	1.45332	5-6
7	-10.638	-20.559	15.70027	-59.2	9.8	-79.7	31.9	C.30479	0.877	-85.4	67.6	40.7	28.9	26.4	1.29935	6-7

JULY 31, 1964 13 HR 25 MIN 43 SEC 973 MS TAB NO 184 ATLAS PHOTO NO 184 POD SEQUENCE NO 973

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
4.827 11.34582 -10.554 -20.755 1746.805 2.608 -64.268 114.774

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.653	-20.540	13.37876	-57.9	10.4	-80.8	32.1	C.26870	0.847	-88.1	67.6	38.3	32.1	28.5	0.	1-2
3	-10.637	-20.563	12.95107	-59.2	9.8	-79.7	31.9	C.25969	0.877	-85.4	67.6	40.7	28.9	26.3	0.86062	2-3
4	-10.634	-20.523	13.50827	-62.9	10.8	-79.2	31.6	C.27079	0.840	-84.9	67.7	36.1	33.0	31.0	1.19829	3-4
5	-10.671	-20.515	13.88247	-56.9	11.0	-81.9	32.2	C.27838	0.818	-91.0	67.7	36.0	35.3	30.3	1.16037	4-5
6	-10.673	-20.557	13.29451	-52.7	10.0	-82.3	32.6	C.26651	0.854	-90.9	67.6	40.6	31.5	25.7	1.23814	5-6
7	-10.637	-20.563	12.95107	-59.2	9.8	-79.7	31.9	C.25969	0.877	-85.4	67.6	40.7	28.9	26.3	1.10710	6-7

JULY 31, 1964 13 HR 25 MIN 44 SEC 813 MS TAB NO 185 ATLAS PHOTO NO 185 POD SEQUENCE NO 974

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
3.987 9.37607 -10.568 -20.726 1744.831 2.609 -64.250 114.769

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.649	-20.548	11.05351	-57.9	10.4	-80.8	32.1	C.22200	0.847	-88.1	67.6	38.3	32.1	28.5	0.	1-2
3	-10.636	-20.568	10.70024	-59.2	9.8	-79.7	31.9	C.21456	0.877	-85.4	67.6	40.7	28.9	26.3	0.71099	2-3
4	-10.633	-20.534	11.16043	-62.9	10.8	-79.2	31.6	C.22373	0.841	-84.9	67.6	36.1	32.9	31.0	0.98996	3-4
5	-10.664	-20.528	11.46949	-56.9	11.0	-81.9	32.2	C.22998	0.818	-91.0	67.7	36.0	35.3	30.3	0.95865	4-5
6	-10.665	-20.562	10.98392	-52.7	10.0	-82.3	32.6	C.22019	0.854	-90.9	67.6	40.6	31.5	25.7	1.02855	5-6
7	-10.636	-20.569	10.70024	-59.2	9.8	-79.7	31.9	C.21456	0.877	-85.4	67.6	40.7	28.9	26.3	0.91465	6-7

JULY 31, 1964 13 HR 25 MIN 45 SEC 653 MS TAB NO 186 ATLAS PHOTO NO 186 POD SEQUENCE NO 975

TRAJECTORY DATA SEC TO IMPACT ALT LAT LCN R V PTH AZ
3.147 7.40182 -10.581 -20.697 1742.857 2.610 -64.231 114.763

PHOTO DATA

PT	LAT	LCN	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD	PHAZ	EMIS	ALPHA	SCALE	PT-PT
2	-10.645	-20.557	8.72715	-57.9	10.4	-80.8	32.1	C.17528	0.847	-88.1	67.6	38.3	32.1	28.5	0.	1-2
3	-10.634	-20.572	8.44830	-59.2	9.8	-79.7	32.0	C.16940	0.877	-85.4	67.6	40.7	28.9	26.3	0.56128	2-3
4	-10.633	-20.546	8.81150	-62.9	10.8	-79.2	31.6	C.17664	0.841	-84.9	67.6	36.1	32.9	31.0	0.78155	3-4
5	-10.657	-20.540	9.05545	-56.9	11.0	-81.9	32.2	C.18157	0.818	-91.0	67.6	36.0	35.3	30.3	0.75694	4-5
6	-10.658	-20.567	8.67222	-52.8	10.0	-82.3	32.5	C.17385	0.854	-90.9	67.6	40.6	31.5	25.7	0.80750	5-6
7	-10.634	-20.572	8.44830	-59.2	9.8	-79.7	32.0	C.16940	0.877	-85.4	67.6	40.7	28.9	26.3	0.72210	6-7

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JULY 31, 1964 13 HR 25 MIN 46 SEC 493 MS

TAB NO 187

ATLAS PHOTO NO 187

POD SEQUENCE NO 976

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				2.307	5.42683	-10.594	-20.668	1740.882	2.612	-64.212	114.757				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-10.641	-20.565	6.39931	-57.9	10.4	-80.8	32.1	0.12852	0.848	-88.1	67.6	38.3	32.1	28.4	0.
3	-10.633	-20.576	6.19487	-59.2	9.8	-79.7	32.0	0.12422	0.877	-85.4	67.6	40.7	28.9	26.3	0.41159
4	-10.632	-20.557	6.46111	-62.9	10.8	-79.2	31.6	0.12952	0.841	-84.9	67.6	36.1	32.9	31.0	0.57305
5	-10.650	-20.553	6.63992	-56.9	11.0	-81.9	32.2	0.13314	0.818	-91.0	67.6	36.0	35.2	30.3	0.55492
6	-10.650	-20.573	6.35905	-52.8	10.0	-82.3	32.5	0.12748	0.854	-90.9	67.6	40.6	31.5	25.7	0.59205
7	-10.633	-20.576	6.19487	-59.2	9.8	-79.7	32.0	0.12422	0.877	-85.4	67.6	40.7	28.9	26.3	0.52955

JULY 31, 1964 13 HR 25 MIN 47 SEC 333 MS

TAB NO 188

ATLAS PHOTO NO 188

POD SEQUENCE NO 977

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				1.467	3.45137	-10.607	-20.639	1738.907	2.613	-64.194	114.752				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-10.637	-20.573	4.07035	-57.9	10.4	-80.8	32.1	0.08175	0.848	-88.1	67.6	38.3	32.0	28.4	0.
3	-10.632	-20.580	3.94034	-59.2	9.8	-79.7	32.0	0.07901	0.877	-85.4	67.6	40.7	28.9	26.3	0.26180
4	-10.631	-20.568	4.10962	-62.9	10.8	-79.2	31.6	0.08238	0.841	-84.9	67.6	36.1	32.9	31.0	0.36446
5	-10.643	-20.566	4.22333	-56.9	11.0	-81.9	32.2	0.08468	0.818	-91.0	67.6	36.0	35.2	30.3	0.35301
6	-10.643	-20.578	4.04474	-52.8	10.0	-82.3	32.5	0.08108	0.854	-90.9	67.6	40.6	31.5	25.7	0.37654
7	-10.632	-20.580	3.94034	-59.2	9.8	-79.7	32.0	0.07901	0.877	-85.4	67.6	40.7	28.9	26.3	0.33680

JULY 31, 1964 13 HR 25 MIN 48 SEC 173 MS

TAB NO 189

ATLAS PHOTO NO 189

POD SEQUENCE NO 978

TRAJECTORY DATA				SEC TO IMPACT	ALT	LAT	LCN	R	V	PTH	AZ				
				0.627	1.47523	-10.620	-20.610	1736.931	2.614	-64.175	114.746				
PHOTO DATA															
PT	LAT	LON	RANGE	AZS/C	AZN	AZSUN	AZA	A*	B/A	AZPHAZ	INCD PHAZ	EMIS ALPHA	SCALE	PT-PT	
2	-10.633	-20.582	1.74002	-57.9	10.4	-80.8	32.1	0.03495	0.848	-88.1	67.6	38.3	32.0	28.4	0.
3	-10.631	-20.585	1.68446	-59.2	9.8	-79.7	32.0	0.03378	0.877	-85.4	67.6	40.7	28.9	26.3	0.11189
4	-10.631	-20.560	1.75881	-62.9	10.8	-79.2	31.6	0.03522	0.841	-84.9	67.6	36.1	32.9	31.0	0.15577
5	-10.635	-20.578	1.80540	-56.9	11.0	-81.9	32.2	0.03620	0.818	-91.0	67.6	36.0	35.2	30.3	0.15089
6	-10.636	-20.584	1.72909	-52.8	9.9	-82.3	32.5	0.03466	0.854	-90.9	67.6	40.6	31.5	25.7	0.16095
7	-10.631	-20.585	1.68446	-59.2	9.8	-79.7	32.0	0.03378	0.877	-85.4	67.6	40.7	28.9	26.3	0.14403